

In the Matter of

Numbering Resource Optimization

CC Docket No. 99-200

Connecticut Department of Public Utility Control
Petition for Rulemaking to Amend the Commission's
Rule Prohibiting Technology-Specific or
Service-Specific Area Code Overlays

RM No. 9258

Massachusetts Department of Telecommunications
and Energy Petition for Waiver to Implement a
Technology-Specific Overlay in the
508, 617, 781, and 978 Area Codes

NSD File No. L-99-17

California Public Utilities Commission and the
People of the State of California Petition for
Waiver to Implement a Technology-Specific or
Service-Specific Area Code

NSD File No. L-99-36

COMMENTS ON AND DIALING PROPOSAL FOR THE EXPANDED USE OF HEXADECIMAL PHONE
NUMBERS UNDER A NEW "INDUSTRY" CLASS OF SERVICE THAT WILL ALLEVIATE THE
AREA CODE ASSIGNMENT CRUNCH AND PROVIDE SUBSTANTIAL EXPANSION OF ALREADY
AVAILABLE NUMBERS IN ALL LOCATIONS AND IN ALL AREA CODES AND ALL AT NO COST
TO ANYONE

Essentials of this document were also submitted to the California Public
Utilities Commission, In the Matter of Commission Order Instituting
Rulemaking on the Commission's Own Motion Regarding Commission Policy on
Area Code Relief, Rulemaking R.98-12-014, (Filed December 17, 1998).

Prof Bill Neill, In Pro Per
Private Citizen, Professional Engineer
P. O. Box 33666, San Diego, California 92163-3666
Telephone: 619/231-1313, Email: proev@mill.net
Website: www.webcom.com/electro7/hex/hex.html

July 27, 1999

Pro Per Attorney for
Prof Bill Neill

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

COMMENTS ON AND DIALING PROPOSAL FOR THE EXPANDED USE OF HEXADECIMAL PHONE NUMBERS UNDER A NEW "INDUSTRY" CLASS OF SERVICE THAT WILL ALLEVIATE THE AREA CODE ASSIGNMENT CRUNCH AND PROVIDE SUBSTANTIAL EXPANSION OF ALREADY AVAILABLE NUMBERS IN ALL LOCATIONS AND IN ALL AREA CODES AND ALL AT NO COST TO ANYONE

Essentials of this document were also submitted to the California Public Utilities Commission, In the Matter of Commission Order Instituting Rulemaking on the Commission's Own Motion Regarding Commission Policy on Area Code Relief, Rulemaking R.98-12-014, (Filed December 17, 1998).

I file these comments on this date, in the Federal Communications Commission's Numbering Resource Optimization, CC Docket No. 99-200. This is in direct support of a separate filing by the California Public Utilities Commission listed as:

California Public Utilities Commission and the People of the State of California Petition for Waiver to Implement a Technology-Specific or Service-Specific Area Code (PLAIN)

NSD File No.
L-99-36

which seeks to pave the way for implementation of this very issue as the panacea of all area code and numbering needs for more than 100 years in the future.

**** A Comprehensive Treatise on the Hexadecimal Number Perspective ****

SUMMARY - Proposed is the creation of a third class of telephone service, to be known as the "Industry" Class. It is to be used as the avenue through which expanded public and private uses of already existing HEXADECIMAL Phone Numbers are made. All aspects of this are discussed in detail, but in a way that non-technical persons can grasp. The scope of this discussion is

exhaustive, but necessary.

1. The cost benefit considerations are established and discussed throughout this writing, along with several specific proposals that are outlined in detail. The whole idea of the relation of the services to their hidden number usage is explored. We are reminded that the public already paid for this HEXADECIMAL system several years ago and that aspect of free-for-the-using is presented. This proposal has nothing whatever to do with vanity phone numbers!

2. No change is proposed or being made by the Neill Plain to any PUBLIC DECIMAL Number. What we are doing is simply using "the rest of the numbers," a very reasonable action and one that is long over due. The depth and breadth of it all, the implementation of this proposal will completely eliminate the need for land line phones, or portable cellular, PCS, or digital, or analogue phones to have to be assigned phone numbers that would need to be dialed using 1+10, or 10 digit phone numbers, and this plain will likely eliminate the need for all overlays and recent splits in California and the nation, as well.

3. Other services including, alphanumeric and tone pagers, faxes, and other PUBLIC HEXADECIMAL Phone services will not necessarily be placed in large HEXADECIMAL overlay area codes. This is because we have several billion numbers available already, just in California alone, that presently are not being used. The very absurdity of it all is astounding!

4. Furthermore, all these benefits can be realized in just several months, essentially now, and every aspect of number assignment gets better with time. The full blossoming of HEXADECIMAL dialing is yet to come. We are but in the bud forming stages as we speak!

5. No one else has offered any solution anywhere near the effectiveness provided by INDUSTRY Service and HEXADECIMAL PHONE NUMBERS. This solves the NUMBER crunch and significantly extends time to the expected exhaust of North American Number Plain to nearly 100 plus years.

6. Finally, rule making and establishing policy on this issue along with actions that are to be taken for the immediate implementation at all levels

of government are well defined and also presented in extensive detail. Policy on area code relief is a multifaceted issue.

7. AUTHOR'S NOTE - This writing delves into Hexadecimals with the knowledge that readers are from very diverse backgrounds, but they still have the right to expect to be able to understand this issue. With that in mind, please take note that in some cases, over simplification of the explanation or deliberately leaving out a not-to-important fact or part so as to concentrate on the big picture was done, because its value outweighs the omission deliberately made. Hopefully, this will not be judged by the author's peers as intellectually dishonest! Also, I have learned from many years of teaching that readers need reinforcement from time to time as they read to understand a whole new concept, with this in mind, I have deliberately repeated some aspects in different points of view and in different locations in this writing: if you think you got it, read it anyway!

8. And finally, expect lots and lots of diversionary responses from your friendly telephone companies and others. It has always been their ploy to raise every issues to every possible height and then endlessly do it all over again, because as they see it, every day that results in a delay on an issue, is a day that they make a million dollar profit. There will be presented all sorts of can't do this or can't do that, well folks, don't you believe it, not even for a second! Check out the issues presented in this proposal, yourself. Accept the challenge, get competent communication engineering advice! Then, but only then, please do respond to the issues presented. I have deliberately asked and answered questions in anticipation of the responses to be received. This is not only to clarify a point or issue, but it will reduce the flurry of paperwork that is to follow.

9. PREFACE - Because this issue is more technical than the average pleading, organizational assistance is provided by way of a TABLE OF CONTENTS and this writing is divided into: Part 1, Introduction and Definitions; Part 2, Discussion and Applications; Part 3, Conclusions and Recommendations, Part 4, Rulemaking and Government, Part 5, Prayer and Submission. These parts should be especially helpful to those in the audience, without technical skills, who want to attain a better grasp of the ramifications of this very important issue by keeping a clear mind,

that is well focused on the subject at hand.

10. It is reported that there are 8 billion humans on this earth. California alone has about 10 billion PHONE NUMBERS as of today. What on earth are they NOT doing that still makes necessary the new requirements for dialing 10 digits to call home, which is only a block away! ET did it better with cooking utensils and a record player, but then he was not being radiated by a telco microwave link!!!

11. There is a dignity, a profound beauty to this HEXADECIMAL thing; it's not unlike the atomic arrangement of electrons that define us all or the electromagnetic spectrum that forms the basis of communications. The difference is God created the electrons and the spectrum, man created the 4 x 4-tone pad, they are all profoundly important to our every aspect of life.

12. NETWORK SECURITY - As you may well imagine the issue of security is vital to any changes in the number base. But in fact, increasing the number base from 10 symbols to 16 symbols is substantially increasing the security of the network. The more symbols there are, the harder the lock is to pick. So, converting to the complete use of all HEXADECIMAL numbers is to everyone's advantage and reduces the probability of unauthorized access substantially.

13. These comments should also be very helpful to the rule makers, since the very act of rule making requires their competence, attention to detail, extensive knowledge of the subject, exercise of very good judgment, and finally, the taking of deliberate action in the public interest. It's better to debate a question without settling it, than to settle a question without debating it. We're off on a wonderful adventure, I hope you enjoy it.

14. TABLE OF CONTENTS

C O N T E N T	P A G E
SUMMARY	2
AUTHOR'S NOTE	3
PREFACE	4
NETWORK SECURITY	5
TABLE OF CONTENTS	6

15. 1: INTRODUCTION AND DEFINITIONS -----

16. --- INTRODUCTION ---

FORWARD	13
THE NEILL PROGRAM	13
WE ARE NOT ALONE	13
INTERNET PUBLICATIONS ABOUND	14
HEXADECIMAL PHONE NUMBERS	14
HEX ON THE BLACK KEYS	14
HARVESTING THE HEXADECIMAL FRUIT	15
EXPANDING EXISTING USE	15
EXHAUSTING NANP	15
ON THE RECORD AT LAST	15
SUPPORT IS WHERE YOU FIND IT	15
EXHAUSTIVE EXPLORATION	16

17. --- DEFINITIONS ---

CENTRAL OFFICE	16
DECIMAL NUMBER SET	16
DIRTY SET	16
DTMF - Dual Tone Multiple Frequency	17
ENLIGHTENED PUBLIC	17
EXHAUST	17
EXPANDED USE OF HEXADECIMALS	17
GENERAL PUBLIC	17
HEXADECIMAL NUMBERING SYSTEM AND SET	17
HEXADECIMAL SYSTEM COUNT	17
INDUSTRY CLASS OF SERVICE	18
LINE CARD	18
NANP - North American Number Plain	18
NUMBER SETS.	18
PHONE CLASSES OF SERVICE	18
POTS	18
PRIVATE HEXADECIMAL PHONE NUMBERS	18
PUBLIC CLASSIFIED	18
PUBLIC DECIMAL NUMBERS	18
PUBLIC HEXADECIMAL PHONE NUMBERS	19
SEPARATION OF SERVICES	19
SERVICE SPECIFIC	19
SURCHARGE	19

SWITCH ROOM	19
TECHNICAL PUBLIC	19
TECHNOLOGY SPECIFIC	19
TONE FACTS	19
TOUCH TONE	19
REFERENCE LIST OF GOOD CONSERVATION CATEGORIES	20
18. 2: DISCUSSION AND APPLICATIONS -----	
19. --- DISCUSSION ---	
PERSONAL DISCLAIMER	21
COMMENTS OR PROPOSAL DECLARED INAPPROPRIATE IN PART	21
EXAMPLE STANDARDS	21
PERSONAL GOAL	21
PROPOSAL INCLUSIVE	22
INDUSTRY CLASS OF SERVICE TO BE CREATED	22
ELECTED OFFICIALS AND THE LEGISLATURE	25
FEDERAL OBSTACLES	25
THE NORTH AMERICAN NUMBER PLAIN	25
CURRENT STATE LEGISLATION	26
All HEXADECIMAL PHONE NUMBERS	26
THE INDUSTRY LINE	26
PHONE NUMBERS TAKE ON NEW STYLE	26
FREE TO USE	26
PHONE COMPANY INCENTIVE	27
WARNING ABOUT OTHER POSSIBLE APPROACHES	28
INDUSTRY NUMBERS	29
CONCENTRATED CONTRASTS	
HEX ON THE BLACK KEYS	
DECIMAL IS SUB SET OF HEXADECIMAL	29
HEXADECIMAL PHONE NUMBER AVAILABILITY	30
EXAMPLES OF NUMBERS	30
WHO IS LISTENING TO WHAT	31
AVOIDING PUBLIC CONTROL CODE EXCHANGES	31
OPTIONAL AREA CODE	32
20. --- APPLICATIONS ---	
BACKGROUND OF AUTHOR	34
TOUCH TONE AND YOU	35
HEXADECIMAL NUMBERING SYSTEM	36
HEXADECIMALS AS IN 6 EXTRA	37

AGED ATTITUDE	37
PROOF EXTRAORDINARY	37
HEXADECIMAL NUMBER APPLICATIONS	38
NETWORK IS INTACT, NO CHANGES ARE NEEDED	39
PUBLIC EXAMINED UP CLOSE AND PERSONAL	39
GENERALLY SPEAKING	39
ENLIGHTENED PUBLIC	39
TECHNICALLY EXPERIENCED PUBLIC	40
PUBLICLY SPEAKING FROM MY SOAP BOX	40
CALIFORNIA ENACTED POOR QUALITY LAW	41
OBSOLETE EQUIPMENT	41
EQUIPMENT MANUFACTURERS WILL COMPLY	42
URGENT REQUEST FOR TEST LINES	43
ALLEGIANCE TO NO ONE	44
NUMBER SYSTEM DESIGNATIONS	44
HOW PUBLIC AND HOW PRIVATE	45
CONTAMINATION DEFINED	45
AB818 BACKGROUND	45
HEXADECIMAL SOLUTION PERSPECTIVE	46
SERVICE SPECIFIC APPLICATIONS	48
TOLL FREE	48
BUSINESS SERVICES NUMBERS	50
LOCAL NUMBERS	51
PAY STATIONS	51
EMERGENCY ADVANTAGE AT LONG LAST	52
ALARM SIGNAL LINES	52
MILITARY AND PUBLIC EMERGENCIES	52
OTHER PHONE COMPANIES	53
HEARING IMPAIRED COMMUNICATIONS	54
CORPORATE PLANTS AND SECURED LOCATIONS	54
PHONE COMPANY BUSINESS OFFICES AND REPAIR SERVICES	54
EMERGENCY SERVICES	55
PUBLIC INTEREST, CPUC, ALJ, AND FCC	55
FRIED GREEN HEXADECIMALS SERVED ON TOAST	55
TELEPHONE COMPUTER PROGRAMMING	56
NIGHTMARE ON TONE PAD AVENUE	60
DIAL PAD RELATIONS WITH THE COMPUTER	60
Figure 1: Dual Tone Multiple Frequency Tone Pad	61

WHY NOT MORE DIGITS	62
ISSUE PROFILE	62
WARNING: Reminder, the ALPHABET column is for perspective only	63
REQUEST: We need to have the phone tone pads changed	63
TABLE 1: == PHONE SYSTEM SYMBOL TABLE ==	64
Figure 2: Dual Tone Multiple Frequency Tone Pad	65
TOO MANY NUMBERS	66
Base 10 DECIMAL	67
Base 16 HEXADECIMAL	67
21. 3: CONCLUSION AND RECOMMENDATIONS -----	
22. --- CONCLUSION ---	
P R O AND C O N	68
Pro:	68
Con:	68
COMPLIANT, COMPATIBLE, CONFIGURABLE, AND CONFOUNDING	69
Compatible:	69
Configurable:	69
Confounding:	70
23. --- RECOMMENDATIONS ---	
TELEPHONE EQUIPMENT MODIFICATIONS	70
HEXADECIMALS AND MANURE	71
POLITICAL, ADMINISTRATIVE LAW, FEDERAL AND STATE COMMISSIONS	72
PUBLIC Perception	72
SEGREGATING SERVICES	73
GENERAL PUBLIC	74
WAY TO RELIEF IS PAVED AND EASILY ACCESSIBLE	74
HOLLYWOOD PAGING COMPANY	74
NORTH COUNTY AREA CODE	75
PUBLIC HEXADECIMAL NUMBER PERMUTATIONS OF * AND #	76
COMPANY CURIOSITY CONFOUNDS CALLING	77
FOREIGN COUNTRY RELATIONS	78
COMPETITOR NUMBER ASSIGNMENT BLOCKS CAN BE INDIVIDUAL NUMBERS	79
NAY SAYERS AND OTHER SNAFUS	79
LOBBY MONEY	80
DISOBEDIENCE IS PREFERRED TO SUBMISSION	80
SIGNAGE AND OTHER PUBLIC DISPLAYS	81
SECURITY AND HEXADECIMALS	82

PUBLIC SERVICE ANNOUNCEMENTS FOR HEXADECIMAL PHONE NUMBERS	83
TONE COMBINATIONS ARE A NATIONAL SYSTEM STANDARD	83
SCOPE OF RULE MAKING DECISION	83
PERIPHERAL BENEFITS IN RELATION TO THIS PROPOSAL	83
EQUIPMENT MANUFACTURERS WILL COMPLY	84
BROUHAHA, COMPLEXITIES, AND PERPLEXITY SNAFUS	84
ABSURDITY OF HAND CHANGING CUSTOMERS TO AREA CODES	84
HEXADECIMAL LINE DANCE	85
HEXADECIMAL NUMBER COMBINATIONS	87
ADOPTION AS A NATIONAL STANDARD, NANP REVISED	88
EQUIPMENT OBSOLESCENCE AND TIME TO REPLACE	88
WHERE WILL IT WORK AND WHY THE DELAYS	90
WHAT LITMUS TEST SHOULD WE APPLY TO THIS PROPOSAL	90
INDUSTRY ACCESS DATA IMPERATIVE TO COMPLETE ACCURATE PICTURE	91
LEGAL PRACTICE IN PRO PER	92
RISK ASSESSMENT AND OTHER POLITICALLY CORRECT ACTIVITIES	93
CONTRASTING DECIMAL AND HEXADECIMAL NUMBERS	93
DECIMAL LINE NUMBER DISCUSSION	94
NOTE: Telephone persons have contributed	96
TO BE OR NOT TO BE	96
STAMPEDE TO MOVE OR RELUCTANCE OR JUST WHEN CONVENIENT	98
COMMENTARY AND ANALYSIS	100
WHAT STANDARD IS APPLICABLE	101
COMMENTARY AND ANALYSIS	102
DOES THE PUBLIC HAVE UNLIMITED RIGHT TO PARTICIPATE	102
DEALING WITH CAUSE AND EFFECT	103
FORMAL APOLOGIES DUE THE AMERICAN PEOPLE AND ME	104
EVERY INTERVENOR SHOULD BE OFFENDED	105
EQUIPMENT LEGISLATION REQUIREMENTS	105
WITH REGARD TO THE NEW TYPE NUMBERS	106
HOW TO TELL WHEN TO DIAL THE AREA CODE	106
TABLE OF THREE DIGIT CODES	107
This is the "0 " page for 3 digit codes	109
This is the "1" page for 3 digit codes	110
This is the "2" page for 3 digit codes	111
This is the "3" page for 3 digit codes	112
This is the "4" page for 3 digit codes	113
This is the "5" page for 3 digit codes	114

This is the "6" page for 3 digit codes	115
This is the "7" page for 3 digit codes	116
This is the "8" page for 3 digit codes	117-118
This is the "9" page for 3 digit codes	119
This is the "A=0" page for 3 digit codes	120
This is the "B=*" page for 3 digit codes	121
This is the "C=#" page for 3 digit codes	122
This is the "D" page for 3 digit codes	123
This is the "E" page for 3 digit codes	124
This is the "F" page for 3 digit codes	125

24. 4: RULEMAKING AND GOVERNMENTS -----

25. --- RULEMAKING ---

ISSUE - ELECTRONIC PUBLISHING	126
ISSUE - ORIGINAL TOUCH TONE / DTMF	126
ISSUE - PHONE NUMBER RECEIVERS	127
ISSUE - CURRENT AREA CODE LOADS	127
ISSUE - PLAINT EQUIPMENT TO COMPLETE INSTALLATION	128
ISSUE - HEXADECIMAL SUCCESS RECORDED ANNOUNCEMENT	129
ISSUE - WARNING ISSUED TO ALL INDUSTRIES	129
ISSUE - REQUEST A LEGAL OPINION BY CPUC ATTORNEY	129
ISSUE - BEGIN A NEW INVESTIGATION AND RULEMAKING	130
WHAT THE RULES OUGHT TO BE	130

26. --- GOVERNMENTS ---

FEDERAL BROUHAHA IS BREWING	131
PHONE COMPANIES IN PERSPECTIVE, PHASORS DRAWN AND SET ON STUN	131
COMPETENT CONSULTANTS COUNT AND IT SHOWS	133

27. 5: PRAYER AND SUBMISSION -----

28. --- PRAYER ---

INTERVENOR OFFERS PRAYER	134
--------------------------	-----

29. --- SUBMISSION ---

ORDER OF THE COURT	135
HEXADECIMALS HERE TO STAY	135
STANDARD NOT NOVEL	135
REQUEST FOR NEW PROCEEDING	135
HISTORICALLY AND OFFICIALLY	136

COMPLINACE WITH THE ORDER OF THE COURT	136
CONCLUDING REMARKS	137
CHALLENGE OF POWER	137
SUBMISSION	137
VERIFICATION	138
CERTIFICATE OF SERVICE	139
ACKNOWLEDGMENTS AND CREDITS	140

30. © COPYRIGHT 1999 by Prof Bill Neill

31. T I T L E:

COMMENTS ON AND DIALING PROPOSAL FOR THE EXPANDED USE OF HEXADECIMAL PHONE NUMBERS UNDER A NEW "INDUSTRY" CLASS OF SERVICE THAT WILL ALLEVIATE THE AREA CODE ASSIGNMENT CRUNCH AND PROVIDE SUBSTANTIAL EXPANSION OF ALREADY AVAILABLE NUMBERS IN ALL LOCATIONS AND IN ALL AREA CODES AND ALL AT NO COST TO ANYONE

** A Comprehensive Treatise on the HEXADECIMAL Number Perspective **

=====

32. ----- PART 1: INTRODUCTION AND DEFINITIONS -----

=====

33. --- INTRODUCTION ---

=====

34. FORWARD - This is about the conservation of PHONE NUMBER resources, the efficient uses of the existing resource, and implementation of a program that involves the creation of the INDUSTRY class of service that will serve as the vehicle to expand the use of HEXADECIMAL PHONE NUMBERS into every area code and prefix and line number that already exist in the presently assigned area codes. No new DECIMAL area codes need be assigned!

35. THE NEILL PROGRAM - This program is visionary in nature, and practical in application. It was first conceived as early as 1984 and expressed in a technical report to the Phone Company in 1988. Nothing has ever come of this proposal as it languishes in some folder on a computer for all these many years.

36. WE ARE NOT ALONE - The continued addition of area codes, became a rallying point for people nationwide who are seeking state and federal legislation to protect them from more area codes. Readers are encouraged to search several national newspapers: Christian Science Monitor, Wall Street Journal, Washington Post, Los Angeles Times, San Francisco Examiner and Chronicle, and USA Today for writings on this subject.

37. INTERNET PUBLICATIONS ABOUND - The Internet is alive with good information. Please see the authors web site at

38. URL: <<http://www.webcom.com/electro7/hex/hex.html>>.

39. Senator Bowen's site page is located at

40. URL: <[http://www.sen.ca.gov/htbin/testbin/
member_infodated?sen.senator.bowen.area](http://www.sen.ca.gov/htbin/testbin/member_infodated?sen.senator.bowen.area)>.

41. No known pages on the CPUC web site are known to provide any information on this subject or actions contemplated to address these issues.

42. The FCC has provided some information on the web at their site:

43. <http://www.fcc.gov/Bureaus/Common_Carrier/Notices/1999/fcc99122.txt>

44. HEXADECIMAL PHONE NUMBERS - Most recently, with the expansion of area codes in California, and in the immediate vicinity of San Diego, now with 4 area codes in the county, the issue of using HEXADECIMAL PHONE NUMBERS again rises to the surface for consideration. So many are unhappy with the expansion of area codes that it is no wonder renewed interest in this program is at an all time high. With the efforts of California Legislators to pass laws that require some public relief from so many area codes at hand, it is time to formally pursue HEXADECIMAL PHONE NUMBERS as the best, if not the only acceptable form of relief.

45. HEX ON THE BLACK KEYS - Consider the PHONE system to be a piano. The white keys we use, the black keys are ignored. We soon learn there are not enough tones to produce the music we want using only the white keys. My argument is to use the black keys along with the white ones. Furthermore, the black keys are distributed and intermingled with the white keys

throughout the keyboard. This makes it very easy to use both as we see fit. This is by far the better approach; it is better than adding more new pianos (DECIMAL area codes).

46. HARVESTING THE HEXADECIMAL FRUIT - Unfortunately, nothing is without risk or time. Some, but not all aspects of this issue will take years to harvest the fruit of the HEXADECIMAL tree. I have a friend with a young, 4' orange tree. This tree produced 7 oranges this last year. In 10 years, this tree will be 20' x 30' and will produce 200 to 400 oranges.

47. EXPANDING EXISTING USE - This proposal calls for the expanded use of HEXADECIMAL PHONE NUMBERS, just like the orange tree, it will produce some fruit now, but lots and lots more later. There are growing pains with any expansion, but we, as a society, are smart enough to realize the need, find a solution, and implement it in a timely fashion.

48. EXHAUSTING NANP - This is the effect that will affect the exhaust term projected for NANP. So great is this effect that it will lengthen the life of the NANP to over 100 years. By that time, we will have solved the multiline problems and no other changes to the phone system will ever be necessary.

49. ON THE RECORD AT LAST - Notwithstanding the issues of state's rights versus federal preeminence by law, this forum will produce well deserved discussions and conclusions that will provide the trier of fact with a good background and a significant collection of applicable facts with which, at the very least, can result in a on-the-record resolution action of the FCC/CPUC and form the basis for further legislative action by this state's legislature and may even prompt similar actions by other states as well. We can all be proud of California for leading the way in America. We have all had enough! This is the first formal action on HEXADECIMAL phone numbers that I know of in America. Lead on, lead on!

50. SUPPORT IS WHERE YOU FIND IT - The author has already solicited and received the support of elected officials: state senators and assembly members as well as federal senators and representatives. These elected officials have felt the heat of disgruntled constituents and feel the need not only to follow this proceeding, but also to position them to act in the

PUBLIC interest on this issue.

51. An informed citizenry is a powerful citizenry. Today what we don't know can cost us a ton of money, allow legislation to happen that will curtail our freedoms, threaten the constitution and negate our vote. Democracy happens only when an informed, engaged and concerned electorate takes responsibility. It's not enough to cast a vote and then let "Bill," do It. Today we must keep tabs on those men and women we sent to government. We deserve the kind of government we get, because we decide at the ballot box.

52. EXHAUSTIVE EXPLORATION ASSURES CONFIDENCE IN RULE MAKING PROCESS - This discussion is in response to the CPUC's own motion for rule making on the subject of Area Codes. Notwithstanding that title, it behooves us all to realize that no meaningful discussion or debate can be had without a thorough and exhaustive examination of each of the underlying elements that support the issue at hand. To fail to do so, or limit the scope, would forever prejudice any conclusion drawn due to insufficient exploration and determination of every aspect of the issue. This is so very important, it is repeated: It's better to debate a question without settling it, than to settle a question without debating it.

=====

53. --- DEFINITIONS --- Some Are Unique Definitions - (Phone Jargon)

=====

54. CENTRAL OFFICE - Switch Room is used the same as Central Office, but now there are no switches and it is not an office!!!! This is the location of the Prefix computers. All phone lines come into this building from parts of the city or county.

55. DECIMAL NUMBER SET - This is what we all use, 0,1,2,3,4,5,6,7,8,9, in our daily lives, but is not true in phone dialing.

56. DIRTY SET - The so called decimal phone number set is dirty, because it includes the HEXADECIMAL digit: 0=A but does not include true zero 0. It is part decimal and part HEXADECIMAL.

57. DTMF - Dual Tone Multiple Frequency - Use of two simultaneous voice band tones for dialing. Also known as touch-tone was introduced in about 1962.

58. ENLIGHTENED PUBLIC - These people page and use voice mail every day. They are contemporary players in the know. This Proposal does not subject them to undue requirements or challenges.

59. EXHAUST - No, it is not your car, it is a term to identify that we are approaching a time when all available numbers have been assigned in an area code. The 213 area code is exhausted so a new area code must be assigned. This applies to area codes as well. We will exhaust the remaining area codes available, not yet assigned, in less than 20 years.

60. EXPANDED USE OF HEXADECIMALS - The system already uses HEXADECIMALS, as in 0=A and *=B and #=C. This Proposal simply demands their expanded use.

61. GENERAL PUBLIC - Especially older folks and those not known to be players. This Proposal protects them, fully.

62. HEXADECIMAL NUMBERING SYSTEM AND SET- The HEXADECIMAL Set (Ø, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F) where the 2 digit: 10=A=0, 11=B=*, 12=C=#, 13=D, 14=E, and 15=F NUMBERS have been replaced by the first letters of the alphabet, which are single letters, thus keeping all 16 symbols single digit.

63. HEXADECIMAL SYSTEM COUNTS - The AREA CODE, PREFIX, and LINE NUMBER. We have $4096 \times 65536 = 268,435,456$ lines for each area code as compared to JUST 10,000,000 in a decimal only system. The whole system is $4096 \times 268,435,456 = 1.0995116E12$ or 1,099,511,600,000 or about 1100 billion numbers, and California alone has 10 billion, today.

64. INDUSTRY CLASS OF SERVICE - This is the part of this Proposal that is the vehicle for implementing HEXADECIMAL Phone numbers.

65. LINE CARD - This is the computer card that your phone line connects to in the central office computer.

66. NANP - North American Number Plain - This is a national program that defines the area code, prefix, and line number to be 3 digits, 3 digits, and 4 digits, respectively.

67. NUMBER SETS - Just a fancy name for all the symbols we all use every day. The binary number set is Ø, 1.

68. PHONE CLASSES OF SERVICE - The traditional classifications are Residence and Business. This Proposal creates the INDUSTRY class of service.

69. POTS - Plain Old Telephone Service. The Industry class of service is indeed, the personification of POTS. You get a line and a dial tone, that is all. Even the connector is extra. Known as HEXpots.

70. PRIVATE HEXADECIMAL PHONE NUMBERS - Examples of machine dial-able (not on existing phone pads - Hex D, E, F, and Ø = true zero) desirable for use by all the services listed below in REFERENCE LIST OF GOOD CONSERVATION CATEGORIES, as in 21F/4D2-FE21.

71. PUBLIC CLASSIFIED - The public may be classified as General, Enlightened, and Technical.

72. PUBLIC DECIMAL NUMBERS - Examples of human dial-able (included on existing PHONE pads - Decimal 1, 2, 3, 4, 5, 6, 7, 8, 9, and Hex 0=A, *=B and #=C) desirable for use by residence and business services as in - 213/456-7890.

73. PUBLIC HEXADECIMAL PHONE NUMBERS - Examples of human dial-able (included on existing PHONE pads - Hex 0=A, *=B and #=C) desirable for use by Fax and Pager and Voice Mail services as in - 213/456-7890 vs. 21#/4#6-*890.

74. SEPARATION OF SERVICES - The idea of placing the phone numbers of certain types of services into specified categories, all to the benefit of the general public. As in Technology-Specific or Service-Specific Area Codes and Technology-Specific or Service-Specific Prefix Codes

75. SERVICE SPECIFIC - The idea of placing the phone numbers of certain types of services into specified categories. See also, SEPARATION OF SERVICES.

76. SURCHARGE - An arbitrary amount, temporarily added on bills for voice mail, pagers, and faxes to encourage them to move to PUBLIC HEXADECIMAL PHONE NUMBERS.

77. SWITCH ROOM - See Central Office

78. TECHNICAL PUBLIC - We who are technically trained, install and service all kinds of systems attached in some way to the phone system. Many of us have been using HEXADECIMALs in our daily lives for many years.

79. TECHNOLOGY SPECIFIC - See SERVICE SPECIFIC

80. TONE FACTS - Tone duration is about 40 milliseconds on and then about the same time off between digits. So you can dial more than a 20-digit number in less than a second.

81. TOUCH-TONE - This is also known as DTMF, Dual Tone, and Multiple Frequency system. It is defined for HEXADECIMAL number system and is what we produce when we use our phone's push buttons. Invented at Bell Labs, it was introduced in 1962 as the solution to the future needs of the phone system. It does not use pulses to dial a number; rather it uses tones to designate the digits of the number to be processed. Everyone in America was forced to pay for this system!

82. REFERENCE LIST OF GOOD CONSERVATION CATEGORIES - The list:

83. 800/888 Toll Free Translator Numbers

84. Alarms, Fire, Burglary, Holdup Systems

85. ATM Systems

86. Automatic Paging Systems

87. Bulletin Board Computer Systems

88. Call Box Signaling Systems

89. Computer Access Phone Numbers as for AOL etc.

90. Computer Access Second Line at Home

91. Corporate Systems

92. Credit Card Verification and Approvals
93. Elevator Phones
94. Emergency 911 System Phones
95. Freeway Emergency Phones
96. Internal Voice Mail
97. Military Communications
98. Pager Phone Services
99. Pay Phone Service
100. Phone Company Business Offices and Repair Service
101. Point of Sale Transactions
102. Public Voice Mail
103. Rotary Lines Second and Above (2-??) (UAL: 1 decimal, 999 HEXADECIMAL)
104. All of the above should be HEXADECIMAL NUMBER based.

=====

105. ----- Part 2 Discussion and Applications -----

=====

106. --- DISCUSSION ---

=====

107. PERSONAL DISCLAIMER - The author has been granted the right to intervene in this issue, but is not a professional telephone tariff junkie. He knows enough to present these issues in reasonable form, but probably not using the jargon with the completeness or exactness many of you would commonly use. Common understandings in words and concepts will prevail in place of alphabet soup. Anyway, experience reveals that the several lurkers to this list are likely to not understand insider jargon, so this approach will allow everyone to participate in the discussion, even if only from the sidelines.

108. COMMENTS OR PROPOSAL DECLARED INAPPROPRIATE IN PART - Should any part of this proposal or the comments be declared inappropriate, for whatever reason and not to be limited to: content, timing, subject, scope, applicability and so on, then the remainder of this Proposal and Comments shall remain as a properly submitted document to be processed, examined, responded to, heard, acted upon, and finally used in rule making by all parties of the government.

109. The author speaks only for himself, not the alarm industry, in whole or in part, or any other industry, for that matter.

110. EXAMPLE STANDARDS - Several PHONE NUMBERS and other exact examples will be used in this writing. DO NOT DIAL THESE NUMBERS! They are shown for illustrative purposes only, no disrespect intended. If your number or a number of someone you know is used here, it is purely coincidental.

111. PERSONAL GOAL - The author started some nearly 15 years ago, to get the phone companies to use HEXADECIMAL PHONE NUMBERS. This continues to be the reason for his being involved with you all. As a PRIVATE citizen, retired, with no stock or financial interest in any system or company, but as a professional electronics engineer, upset that these extra digits are still not in use in the PHONE system. It is such an obvious no brainier to use the rest of the Touch Tone system we all paid for 20 years ago, rather than more new DECIMAL area codes, which we are about out of anyway.

112. Readers are encouraged to learn more about it by viewing the author's web site at: <<http://www.webcom.com/electro7/hex/hex.html>> for details.

113. PROPOSAL INCLUSIVE - This Proposal is about the conservation of PHONE NUMBER resources. Somehow our federal agency, the Federal Communications Commission (FCC), lost its way when it came to the nations PHONE NUMBER system. This agency vehemently guards our electromagnetic spectrum allocations. Never would the FCC allow several grossly destructive uses of the spectrum, yet such assignments as "00 INFO," "*70," and "10-10-123" clearly indicate that someone has been asleep at the helm. Notwithstanding the desire for phone features to be under public user control, which is recognized, it is the implementation in these examples that consumes 8 to 800 million numbers in the process that is an egregious act of folly. We must insist on the conservation of this numeric resource with the same tenacity, as is the case for the spectrum!

114. INDUSTRY CLASS OF SERVICE TO BE CREATED - Implementation of a program that involves the creation of the INDUSTRY class of service is essential to the success of this conservation method. Fortunately, a byproduct of adherence is that there will be no need for new DECIMAL area codes and full

support for the North American Number Plain (NANP), which is a mandatory requirement for any program, will be fully maintained.

115. We have long had the two service classes of Business and Residence. We will create and implement the proper environment for, but not limit it to, the assignment and use of HEXADECIMAL PHONE NUMBERS by creating a new class of service, to be known as INDUSTRY.

116. All telephone companies doing business in this state offer two classes of service: Residential and Business. It has been common practice to deny services requested in opposite locations. If you have a business PHONE, the PHONE Company will not install a residence PHONE at that location. If you have a residence PHONE, the PHONE Company will not install a business PHONE in that location. This Proposal, if implemented, will change that policy.

Business

Industry

Residence

Public Decimal

Public Decimal

No change from existing
numbers we use today.

No change from existing
numbers we use today.

uses
HEX
A
DECIMALS

Public Hexadecimals human dialable		Private Hexadecimals machine dialable
FULLY COMPLIANT WITH NANP All are unused numbers, located everywhere, and they are FREE!		
USES THESE EXTRA SYMBOLS * AND # in numbers that look like: 619/3*4-1234, 619/75#-9123, 619/675-*123, 619/837-23#5 Use Public Hexadecimals for the following (everybody can dial) Pagers Faxes Voice Mail other uses	NOTES	USES THESE EXTRA SYMBOLS D, E, F, @ in numbers that look like: 619/7D9-0123, 619/9@5-F123, 619/60E-FF34, 61F/742-3125 Use Private Hexadecimals for the following (nobody can dial) Alarms Freeway Phones Elevator Phones Point of Sale Computer Modems other uses

Migration of these various users to Hexadecimal Phone Numbers will free up more than enough Decimal Phone Numbers for public uses for the next 100 plus years. No new Decimal Area Codes are needed with this plain. Line numbers go from 10,000 to 65,536 everywhere!

All phone company systems are already hexadecimal (Touch Tone, DTMF) so this plain is FREE, because we already paid for it 20 years ago!

Learn more at <<http://www.webcom.com/electro7/hex/hex.html>>

117. Prof Bill Neill, Hex Proposal to CPUC and FCC.

118. ELECTED OFFICIALS AND THE LEGISLATURE - This is an issue that concerns everyone in every state: large or small businesses, and every resident. There are several state officials concerned about this issue: California Assemblyman Wally Knox (D - Los Angeles) has introduced a bill, AB-818, to attempt to address some of the concerns of the PUBLIC in California.

119. His bill in the assembly, AB818 AREA CODES, is wrongly implemented, although he has good intentions. It seeks to assign various large number users, such as pagers, faxes, etc. to NEW DECIMAL AREA CODES, so as to relieve the existing area codes of the large number users, by moving them to the new code. This is not a good way to deal with the large users of numbers, because this still requires the existence and assignment of DECIMAL area codes and it still consumes more of NANP's dwindling number of remaining DECIMAL area codes. It must be amended.

120. There are other state officials, in New York for example, with concerns about these very issues. Locally, U. S Congressional Representative Brian Bilbray, and U. S. Senators Barbara Boxer and Dianne Feinstein, my representatives, have made numerous requests to the FCC on my behalf, but in each case we get the same non responsive 3 page reply with a bunch of nonsense from the Common Carrier Bureau, always ending with the same comment: HEXADECIMAL NUMBERS are interesting! No action has ever been taken or promised in all these years of effort by them and me.

121. FEDERAL OBSTACLES - The FCC looms menacingly over all these issues. Clearly they have not addressed our concerns and the public is mad about this failure. Some relief may be forthcoming. A bill in congress is SB 765, sponsored by Senator Collins of Maine and Senator Toricelli of New Jersey. This bill does not address several of our concerns and will need to be amended to include these proposed issues, but it is a start.

122. THE NORTH AMERICAN NUMBER PLAIN - This Proposal aids the NANP by NOT USING ANY EXISTING OR FUTURE DECIMAL AREA CODES. It does not require any special moving of users to a new DECIMAL area code, just move to the HEXADECIMAL parts of the existing line numbers and prefixes and area codes that WE ALREADY HAVE! Under the HEXADECIMAL system, line numbers for all exchanges go from 10,000 to 65,536 for free and at no cost to the PHONE

company or the PUBLIC and the NUMBERS are both dial-able on existing PHONE pads and by computer on all systems in use today. Only this Proposal offers a plain that will assist NANP by extending the projected exhaust to 100 plus years or more, a very long time, indeed. I should win the no bell prize for this solution, or at least lunch!

123. CURRENT STATE LEGISLATION - Legislation, if amended, MAY order the CPUC to create a new class of service to be known as, INDUSTRY. Furthermore, the CPUC may be ordered to require ALL PHONE COMPANIES doing business in this state, now or in the future, to offer the INDUSTRY class of PHONE service. The word INDUSTRY is preferred over Industrial since it suggests a foundry instead of all kinds of different Industries as in the Alarm INDUSTRY, the Pager INDUSTRY and so on.

124. Unlike Business or Residential service, INDUSTRY service can be located in a business along side Business service PHONES and can be located in a residence along side Residential service PHONES. INDUSTRY PHONE service is not to be restricted in any way; this policy is to be mandatory.

125. Unfortunately, the author does not remember the exact phrase, but it goes something like this: "A savings account is never needed until it is too late to begin." We must get this class of service in operation post haste, else we never will get users to avoid use of the other classes of service, in which we are continuing to use up DECIMAL PHONE NUMBERS. Alternatively, by selecting INDUSTRY and HEXADECIMAL PHONE NUMBERS, which we have in existence today, several billion in California alone, all of which are presently going to waste!

126. All HEXADECIMAL PHONE NUMBERS - The INDUSTRY class of service, without regard to where the PHONE line is terminated, is to be designated as being a part of this Proposal. No difference in monthly fee or installation charges will exist between INDUSTRY PHONE located in a business or residence. The proposed fee for INDUSTRY class of service is to be \$52.00 per year. This is in line with the present offerings of Cox Telephone pricing for a second DECIMAL PHONE line charge at \$5.00 per month. It is full featured, but here, all you get is a line with a dial tone; no listings, no features, no instrument, and you pay for the connector if wanted, period!

127. THE INDUSTRY LINE - You get a line with a dial tone and that's all folks! No PHONE instrument, no 411 listing, no call forwarding, or other features at all, but all calls are to be timed to the second. \$52.00 per year with 100 calls per month included, for computer access to AOL, for alarms (from 0 or 1 to 4 calls or up to 60 one to two second calls per month), elevator phones (one call per month), pagers (in line), faxes (in line). Or a flat rate for credit card verification (thousands of calls) and point of sale applications (30 calls) with unlimited call allowances. All will be argued and decided upon later.

128. PHONE NUMBERS TAKE ON NEW STYLE - Phone numbers like, 619/231-F43C and 6F9/231-1234 and 80B/222-4567, 619/231-#345 or 619/231-*678; NO these are not VANITY LETTERS! Just using a HEXADECIMAL in the line number produces 65,536 NEW PHONE NUMBERS where there were only 10,000 NUMBERS before. If any digit of a number is HEXADECIMAL, then the whole number is HEXADECIMAL. When a person sees the # or * in a number, they know the number is to a fax or pager or voice mail and that the entire 10 digit number must always be dialed.

129. FREE TO USE - THIS IS AT NO COST TO THE PUBLIC OR THE PHONE COMPANIES and the NUMBERS can be located ANYWHERE you need them.

130. PHONE COMPANY INCENTIVE - The phone company will like the idea that the phone service fee is to be paid a year in advance and that the money may be used as the phone company sees fit. Invest it and earn the interest for the Phone Company.

131. In all cases, the fee or charge is to be 20% lower than the lowest fee or charge normally charged for either class of service through the year 2005. This is a part of the necessary PUBLIC incentive to request the use, originally, of HEXADECIMAL NUMBERS and or to encourage migration from existing DECIMAL PHONE NUMBERS to INDUSTRY class of services using HEXADECIMAL PHONE NUMBERS.

132. The 20% discount will be only a small incentive to prod existing established users of DECIMAL PHONE NUMBERS to migrate to the INDUSTRY class of service and the beneficial use of HEXADECIMAL PHONE NUMBERS. As they do

migrate, their old DECIMAL NUMBERS will become available on a timely basis for PUBLIC DECIMAL assignment, as for business or residential uses. New users will find the lower rates appealing and will undoubtedly request the INDUSTRY class of service for all subsequent needs.

133. WARNING ABOUT OTHER POSSIBLE APPROACHES - Unlike the idea of requiring several user types (pagers, faxes, etc.) to be placed in special DECIMAL area codes, overlay or not, no long lasting benefit will be realized, because they still provide only 10,000 lines per exchange, and most distressing, this does nothing to support NANP; in fact, this approach continues to consume NUMBERS from the DECIMAL pool, only now, it is from a different end of the same pool!

134. The idea of adding a digit has been proposed. Some would add it to the area code, making it 4 digits long. Others would add the extra digit to the prefix or the line number or even add a digit to the existing 7-digit format to distinguish between various overlay area codes, thus helping ease the burden of 11-digit dialing for each and every number. None comply with NANP! None will succeed for this very reason. Yet, HEXADECIMAL Phone Numbers DO COMPLY with NANP and require no changes in any automatic equipment. This is THE CHOICE by a far margin, nothing else is even close, and BEST OF ALL it is free!

135. INDUSTRY NUMBERS - In contrast, HEXADECIMAL PHONE NUMBERS provide 65,536 lines per exchange and fully supports NAPA by utilizing new, unused NUMBERS, never before available. No new computer needs to be purchased by the PHONE Company to provide service for HEXADECIMAL PHONE NUMBERS. Additionally, only the needed lines are to be built into any exchange and best of all, every exchange benefits from HEXADECIMAL, since every existing exchange can have only as many HEXADECIMAL NUMBERS added as are needed, up to the 65,536 limit per exchange, and they all are at no cost!

136. CONCENTRATED CONTRASTS - Contrasting further these differences, we see that all existing exchanges have today, at no cost, the ability to provide HEXADECIMAL PHONE NUMBERS. In concentrated, high use areas, this advantage allows for building only what is needed and only where it is needed, anywhere using any exchange in any area code. Such geographical diversity

at no cost is a very, ultra ultra high cost benefit for both the PHONE companies and the PUBLIC.

137. HEX ON THE BLACK KEYS - Consider the PHONE system to be a piano. The white keys we use, the black keys are ignored. We soon learn there are not enough tones to produce the music we want using only the white keys. My argument is to use the black keys along with the white ones. Furthermore, the black keys are distributed and intermingled with the white keys throughout the octaves of the keyboard. This makes it very easy to use both as we see fit. This is by far the better approach; it is better than adding more new pianos (DECIMAL area codes).

138. DECIMAL IS SUB SET OF HEXADECIMAL - The DECIMAL Numbering system is a sub set of the HEXADECIMAL Numbering system. If you have kids, ask them to explain set theory to you or visit my web site! Consider my PHONE NUMBER: 619/231-1313. Let us examine the sequence using only the last digit: 1310 , 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 131A=0, 131B, 131C, 131D, 131E, 131F, 1320 . See how the NUMBERS 131B to 131F (and 1310 , the 0 on your dial is actually hex A; 1310 refers to true zero) are NOT used in our present DECIMAL PLUS PHONE NUMBER scheme. We are using hex A=0, B=*, and C=#; so the word PLUS modifies strictly DECIMAL, 0 to 9 to make it into 1 to 9, and A, B, C) the PHONE NUMBER tone pad and the scheme presently in use today.

139. It is like the black keys on the piano, they are adjacent to where we stop using; just ready as can be to reach out and touch someone! When we do use them, the line count goes from 10,000 to 65,536. Wow! Now that is 6 times as many NUMBERS in an exchange. Remember that you only build as many lines as are needed. Some rural areas have only one octave of keys (lines) built in their switch, but as I tell you, just as in the 1313 example, HEXADECIMAL NUMBER lines are there, like the black keys in just one octave, ready to be used and they are FREE!

140. HEXADECIMAL PHONE NUMBER AVAILABILITY - They are available everywhere that there is a PHONE, and since this provides additional revenue for the PHONE company from the otherwise fully utilized plant equipment and it is at no cost, they gain in new value for what was previously fully utilized plant equipment by a factor in excess of 6 fold. Think about it! No new

computer need be purchased, we simply use what is already there and working. No new area codes and no new prefixes. Do you think the PHONE Company will give an even better discount for this clear advantage?

141. EXAMPLES OF NUMBERS - Consider the 619/231 exchange in San Diego. This exchange is located in high population downtown San Diego and is fully built and is fully assigned. An estimate is that only 15% of the 10,000 possible DECIMAL NUMBERS are not in use and these rotate between newly shut off service and new installs that will become available for assignment as attrition time expires. Creating the HEXADECIMAL PHONE NUMBERS 231-(0 0 0 0 to FFFF) is completed by installing the needed line cards in the computer bays and attaching lines from the cables serving the area. This expands the 231 exchange from 10,000 to 65,536 PHONE NUMBERS. Only the needed NUMBER of line cards will be installed. Suppose it was decided by the plant manager to "build" only the D0 0 0 to DFFF NUMBERS for now and when filled, add E0 0 0 to EFFF.

142. How nice, build only what is needed anywhere it is needed! Also in this switch room building is the 619/696 exchange. This exchange may be built to accommodate HEXADECIMAL PHONE NUMBERS as needed, just as the 231 exchange is expanded only as demand requires. And it is all free! All systems already work using HEXADECIMAL NUMBERS.

143. Then there is the 909/674 GTE exchange in the very small, but growing Lake Elsinore, CA. The population is so small that only 1000 to 1999 and 2000 to 2999 were ever built in this exchange. Line NUMBERS that begin with 0 or 3 to 9 do not exist, because of low population in the area of service. But, we still have HEXADECIMAL NUMBERS available in this exchange, since they are added to 10 0 0 to 1FFF and 20 0 0 to 2FFF. See how wonderful this system fits. No new anything to buy. Just plug in the line cards and connect up the lines. The system is fully HEXADECIMAL as it stands today.

144. WHO IS LISTENING TO WHAT - It is the job of phone company equipment to complete the call as dialed and maintain the connection until the calling party hangs up. All kinds of systems, voice mail, paging, alarms, etc. use the * and # and all the rest of the decimal and HEXADECIMAL digits to control the system they are connected to. Nothing in this proposal affects any of those systems.

145. The use of these digits in a phone number, as in 452-*703 is proper and does not cause any problems because during the time dialing is being done, only the digits are being captured and extracted as a viable phone number that is to be completed. Having said that, there is a problem at some levels in every system.

146. AVOIDING PUBLIC CONTROL CODE EXCHANGES - Suppose you are making a call from 415 and you are in the local calling area of 415. You do not need to dial the area code, just the 7-digit number. But suppose you dial *70 for a call-duration-block of call waiting. Clearly this would pose a problem if there were a prefix of *70-9456 in existence in the 415 area code. Unless of course, we impose precise time completion requirements between the digit 0 and the digit 9 of the number or optional area code.

147. But, here again, this is a Public HEXADECIMAL number that could be assigned only to computer dialing equipment that does it's dialing in a fast string, with none of the delays we humans could make while completing the dialing. An Example of programmed delay is the delay in action when you dial the 0 for operator. Try it! If this possible delay were eliminated, the calls would be processed without a problem. But with so very many numbers available today, we can afford to not use *7x prefixes for the foreseeable future. This is a study item.

148. OPTIONAL AREA CODE - For travelers using their portable dialers or computer dialers, staying at a hotel in San Francisco, when they want to dial the office or their voice mail in Texas, the computer has a problem. It does not know they flew to San Francisco, so it dials only the prefix not the area code and the prefix. This is the way most programs work and several work arounds having been made, but no one has done the obvious: make the dialing of the area code optional for calls from within the area code.

149. So I want to call 415/234-9012, since I am now in 415 at a hotel, I need only dial 234-9012, because the call is a local call from there, but when I was in Texas, I trained my Macintosh computer to dial 415/234-9012. Being the obedient servant that it is, it dials the area code before the number prefix. This gets me a reject recording for no good reason. So why

not make the area code optional for calls from within the local calling area? I can program this feature myself and I am sure the Phone Company can too. See how simple life could be with just a little help from our bell system friends!

150. The concept of optional area code dialing for calls from within the area code lends itself to yet another advantage besides the traveler's communications convenience. Nationally recognized numbers, such as 911, 0 and 1 and 411 are among those that come to mind with under use or no use at all. For example, 1-619/014-3456 and 1-619/123-0987 are known as the zero hundred and one hundred number prefixes, but there is no reason not to consider 1-093/194-1234 and 1-115/003-9213 as well, and these are known as the one hundred and zero hundred area codes.

151. We can not and should not waste 25% of the available numbers just because some restrictions have to be placed on their secondary usage. No good reason exists for not using these and you all know the reasons for using them. The question is how to implement this concept and what should be the restrictions.

152. Why shouldn't 911-1234 be perfectly good for emergency phones? We can't dial into these phones anyway, but if we try, we will get the primary use, 911 for an emergency call. This is as it has been planned and is in effect throughout the North American system. But there is one very big number of emergency phones, along the freeways, in elevators, on bridges, you name it, they are there and again I do not object in any way to this usage. What I do object to is the waste resulting from the habit of considering these numbers to have only a primary use and once that is done, there is no secondary use for the numbers. This is foolish business. Use these numbers in applications that do not affect the integrity of the primary usage, yet do allow for secondary usage.

153. In the case of 911, of the 65536 HEXADECIMAL or as it stands today, 10,000 numbers in the decimal system that are available, we only use 1 of the numbers, 911 which is translated just like the toll free 800 numbers to a substituted in pots number and then the call is completed. So why not make the substituted number 911-2345. This number does not have a problem being dialed at that phone company network level and it represents a change

from total waste to moderate usage of, at the very lest, 10,000 numbers. More importantly, it frees up what are the otherwise used public decimal numbers for public reassignment.

154. Then we have the 100 and 000 problem. This is still a good application for a multitude of services. In every case where the person does the dialing, any pause between the digits during dialing will render such application marginal, but this is simply not present when these numbers are computer dialed. All kinds of applications exist, including computer modem dialing to the Internet provider.

=====

155. --- APPLICATIONS ---

=====

156. BACKGROUND OF AUTHOR - While teaching electrical engineering for 23 years, I also owned a small alarm business and was the primary sales person for it. Calling on thousands of people for sales purposes, one develops a perception about what people say and do, and after a time, it is possible to "read" people.

157. During the last 15 years, I have written letter after letter and made call after call to all parties: FCC, CPUC, and all the many PHONE companies about the possibilities of using HEXADECIMAL NUMBERS as PHONE NUMBERS for "not-dialed-by-people" applications.

158. Now, with the existence of home computers, email, and web access, they all permit us to communicate easier and faster. I have sent email and completed numerous questioners about the issue of HEXADECIMAL NUMBERS, but I have never received a single reply! As I pointed out, I read

159. People reasonably well and I smell a rat! Ask your self: "What other explanation is there?"

160. My reasons for contacting the PHONE companies was partly because the PHONE companies kept telling the alarm INDUSTRY that new charges would be made for using the toll free 800 NUMBERS. This INDUSTRY uses millions of toll free NUMBERS for the transmission of security and fire alarm signals, as well as hold up and health emergency events. Alarm companies do not want

people to be able to dial these NUMBERS because they terminate in their computers and admittedly it is a low risk overload possibility, but it could cause problems and prevent or slow the reception of alarm signals. We don't want the burglar to call the DECIMAL PHONE line NUMBER to try to defeat the emergency outgoing call to the monitoring station. So using a PRIVATE HEXADECIMAL NUMBER is actually a good idea, because it drastically cuts down on the ability to dial these NUMBERS from a Pacific Bell pay PHONE or any other phone! The alarm INDUSTRY would embrace the use of HEXADECIMAL NUMBERS over DECIMAL NUMBERS, any day!

161. There are dozens of other applications that may use HEXADECIMAL PHONE NUMBERS. They include, elevator phones, highway phones, pagers, faxes, all second and above NUMBERS in a multiline business or PHONE bank, computer access NUMBERS, point of sale, credit card verification, and so on.

162. TOUCH-TONE AND YOU - Some 20 years ago the FCC ordered every user of telephone service to pay a small monthly fee for the then new touch-tone push button PHONE system. This system is a 4x4-button system, not the 3x4 buttons you have on your PHONE today. The DECIMAL Phone Numbering system consists of

163. 1,2,3,4,5,6,7,8,9,0 but the HEXADECIMAL system goes on with Ø ,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F. All computers use this Numbering system and the PHONE system uses computers to provide PHONE service. We all paid for this HEXADECIMAL NUMBERING system, yet we got only the DECIMAL system. Do you smell a story about fraud? How many billions did we all pay for this system?

164. As our American PHONE system is presently configured, we have as an example, 619/231-1313, my PHONE NUMBER. The 619 is the area code. The 231 is the prefix. The 1313 is the line NUMBER. Using ONLY the line NUMBER and contrasting the DECIMAL and HEXADECIMAL possibilities we find that there are 10,000 NUMBER possibilities. But by using HEXADECIMAL NUMBERS, there are 65,536 NUMBER possibilities. That is 55,536 extra PHONE NUMBERS for FREE. No new area codes needed! A HEXADECIMAL PHONE NUMBER would look like 619/231-F3C1.

165. The PHONE system already works using HEXADECIMAL NUMBERS, so nothing is required to expand further into the HEXADECIMAL NUMBER system. We

already use HEXADECIMAL A, B, and C as the buttons 0, *, and #.

166. Using the HEXADECIMAL NUMBER system will extend the life of the PHONE NUMBER system by some 100 plus years. The DECIMAL NUMBER system is currently projected to expire in less than 20 years.

167. HEXADECIMAL NUMBERING SYSTEM - A simple numbering system:

168. Hex (Ø , 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F)

169. The 2 digit: 10, 11, 12, 13, 14, 15 NUMBERS have been replaced by the first letters of the alphabet, which are single letters. This keeps all 16 symbols single digit.

170. The proper utilization of NUMBERS in the existing system is essential and proper. But there are two flaws:

171. One is the steadfast refusal to assign the 0xx and 1xx prefixes and the continued failure to make use of the 911-xxxx exchange and the 611-xxxx exchange and so on. These are all assignable, provided a specific procedure is followed. Some of the assignment possibilities for 0 and 1 that will not cause problems with 0 for operator and 1 for toll call access are to use these as NUMBERS for Freeway Call Phones and "translated-to" NUMBERS as in 911. In other words, there must be a real effort to make assignments in 0xx and 1xx since they and 911/611/411 etc. represent 20+% of the NUMBER assignments available in an area code, and this is simply too high a figure to be ignored.

172. The other flaw in NUMBER assignment is the failure to realize that built in to this system, but deliberately prevented from being used, is the fact that more than the digits 1 to 9 and 0 exist. We have a base 16 number system not a base 10 number system. The actual range is Ø to 9 and A to F. This gives rise to NUMBER assignments that look like this: 2EC-8B9D, or 23A-4BB2. When the touch-tone system was invented, 16 buttons were provided, but only 12 are on the Public's Phones. The missing column is to the right.

173. HEXADECIMALS AS IN 6 EXTRA - The availability of the 6 digits provide

for additional NUMBER assignments of 6/16th or about 37.5%, but this figure will have some burden amounting to a minor reduction in the final analysis. Even so, the PUBLIC has the right to expect the full and complete utilization of this existing numeric resource within the established numeric format, and that fully complies with NANP.

174. AGED ATTITUDE - This is even more essential when it is realized that it is free. Nothing need be changed to use these NUMBERS, save the line cards at the Switch Room and the formal dislodging of the old, out dated attitude of Pacific Bell and all the other phone companies.

175. You can be sure, they will fight and outright refuse to proceed, claiming all sorts of costs, all of which are motivated by money. Keep in mind, when Pacific Bell comes up with a new area code, you just think no extra charges apply, but hidden in all this is the requirement that new yellow pages and new white pages will have to be produced. Now, who will pay for these extra ads? You got it, we will pay with increases in business costs. Clearly, this issue of the unnecessary proliferation of area codes in America and that they amount to a significant source of peripheral revenue for the PHONE companies will reverberate for some time to come.

176. PROOF EXTRAORDINARY - Some application of the HEXADECIMAL system is in full use and has been for more than 30 years. All alarm systems, fire, burglary, holdup etc. transmit over the national and local network in HEXADECIMAL and have HEXADECIMAL NUMBER identification assignments.

177. As a side comment, the costs of digital alarm equipment in the last 10 years have plummeted by figures of \$265.00 to \$79.95 with triple the features added.

178. How come the PHONE bill is going up when the other business services are going way down? How come the price of call forwarding is \$3.50 yet it costs nothing to provide. Even the 7 lines of computer code that makes it work are the highest revenue producing computer code in the world by several hundred thousand percents.

179. How come the Voice Mail Computer costs less than \$3,000. in total, yet produces 5x that in income per each and every month. Now, to prevent

competition, the CPUC has allowed them to charge extra for call forwarded messages, effectively preventing free competition in the voice mail field. Are you sure they are protecting us from them, or what? Those lobbyists sure know how to party.

180. The idea of assigning HEXADECIMAL NUMBERS for PUBLIC use is very reasonable and should be implemented immediately. Of the many applications, here are a few.

181. HEXADECIMAL NUMBER APPLICATIONS - Explore this list of use areas:

182. 800/888 Toll Free Translator Numbers

183. Alarms, Fire, Burglary, Holdup Systems

184. ATM Systems

185. Automatic Paging Systems

186. Bulletin Board Computer Systems

187. Call Box Signaling Systems

188. Computer Access Phone Numbers as for AOL etc.

189. Computer Access Second Line at Home

190. Corporate Systems

191. Credit Card Verification and Approvals

192. Elevator Phones

193. Emergency 911 System Phones

194. Freeway Emergency Phones

195. Internal Voice Mail

196. Military Communications

197. Pager Phone Services

198. Pay Phone Service

199. Phone Company Business Offices and Repair Service

200. Point of Sale Transactions

201. Public Voice Mail

202. Rotary Lines Second and Above (2-??) (UAL: 1 decimal, 999 HEXADECIMAL)

203. All of the above should be HEXADECIMAL NUMBER based.

204. NETWORK IS INTACT, NO CHANGES ARE NEEDED - As proof, alarm signals are transmitted daily, in Hex, and have been for many years. The collective total savings in NUMBERS (20% from 0xx and 1xx) and (37% from Hex) represents about a 50% block of not used or under used NUMBERS that fit the

profile already established for the nation-wide network in EACH area code. 50 PERCENT, 50!!!!!! No business or government can in good faith waste 50% of what is now a NATIONAL RESOURCE.

205. PUBLIC EXAMINED UP CLOSE AND PERSONAL - Transparent to the general public, but no one should reply to this issue with the comment that it is too complicated or that the general PUBLIC will be confused, as nothing could be farther from the truth. There are three reasonable classifications of the PUBLIC: General, Enlightened, and Technical. The general PUBLIC will never know this system is in use, except that no more new DECIMAL area codes will become known to them, and for that, they will be very pleased!

206. GENERALLY SPEAKING - the PUBLIC will never dial a hex PHONE NUMBER, except for PUBLIC HEXADECIMAL NUMBERS for paging or faxing or voice mail access etc. in which case, users are in fact, no longer the GENERAL PUBLIC, but are ENLIGHTENED PUBLIC with some abilities beyond their general PUBLIC counter parts.

207. ENLIGHTENED PUBLIC - These same people will encounter PHONE menus directing them to press 1 and #3 and * to start over in a PHONE menu, so directing them in the first place to dial a PHONE NUMBER like 23#-1234 or 458-*123 is simply not a problem. And this enlightened PUBLIC classification includes personal computer users, who only program their America On Line dialer window, as an example, to dial a PHONE NUMBER that has been provided by AOL as the NUMBER to be inserted in the space provided. It is folly to think that these same persons will somehow develop fright over changing a PHONE NUMBER from 234-5678 to 23F-1DCB using their computer keyboard for the one-time entry of the NUMBER that will last for the next several years of service. These NUMBERS are saved and dialed by the program, forever, until changed by human intervention or by aliens blasting us with rays not yet know to humanity.

208. TECHNICALLY EXPERIENCED PUBLIC - These are technically experienced persons, such as alarm technicians, PHONE installers, point of sale installers, etc. that are already trained in HEXADECIMAL NUMBERS from their education in set theory and technical computer jargon, so they will have no problem using the full range of HEXADECIMAL charters and the resulting codes required for any application we may conceive. Programming of these

systems fall within the PRIVATE HEXADECIMAL NUMBER category and is accomplished by the technical PUBLIC. Telephone installer test sets include all HEXADECIMAL digits and are available off the shelf, today, for merely \$10 extra.

209. PUBLICLY SPEAKING FROM MY SOAP BOX - Dan Quayle, a man with a special affinity for the "e" on the end of his name, can say things I can't or won't so it is fair that I say things he will not. The best description for the functioning of the FCC is outrageous. It is outrageous that the PHONE bills go up when all other computer based services go way down. For example, the alarm control panels did cost \$350 to \$500, now they cost \$80 and have dozens more and better features. Call waiting costs nothing to implement and can be programmed in less time than it takes to drink a beer, yet CPUC allows the PHONE company to rape the PUBLIC with the outrageous charge of \$3.50 per month. And it goes on and on, clearly those responsible for protecting the PUBLIC interest deserve a grade of F and this fact is finally, at long last, becoming the subject of legislation in California.

210. CALIFORNIA ENACTED POOR QUALITY LAW - Without any professional communications engineer's advice, the California Senate committee proceeded to enact Assembly bill AB818 Area Codes. This process was broadcast over the Internet so that all of us could hear the lack of meaningful discussion, and complete kowtow to the phone companies! Now you know what the second highest expenditure lobbyist group gets for their money.

211. There was not one person with any knowledge of this HEXADECIMAL proposal. Although, this issue was sent to every member of the committees and to the author of the bill and to the Chairwoman. Now you know why we have so very many dumb laws. Just ask the public!

212. On the other hand, some Senators demanded that California simply ignore the FCC altogether. The point being, if you are in charge of this, then do your job or we will do it for you. And, finally the point was made, 'JUST DO THE RIGHT THING.' So here it is, the right thing, it is to immediately introduce HEXADECIMAL numbers to both the California and National system. The NANP is intact, and these additional numbers are fully compliant. JUST DO THE RIGHT THING!

213. OBSOLETE EQUIPMENT - Nothing in this proposal creates or causes any equipment to become obsolete. It is true that some new features will require new equipment, but this is exactly one of the reasons for our urgency claim for proceeding with haste.

214. The telephone on your desk or at home and the pay Phones and PCS, analogue and digital cellular Phones (some cell Phones display true HEXADECIMAL today, check the display when you push the 0 and the # and the *), all Phones will still have the 3x4 dial you are familiar with today. It will still allow you to dial all DECIMAL PHONE NUMBERS and it will still allow you to use the control features embodied in *70, etc., and voice mail controls as in # and or * and all the DECIMAL digits that you routinely use today.

215. In addition, this same PHONE pad will allow you to dial PUBLIC fax, PUBLIC pagers, PUBLIC voice mail, and other PUBLIC designated services. These classifications are PUBLIC HEXADECIMAL NUMBERS and do require the use of the # and * somewhere in the NUMBER. Just in case you still don't understand, the # and * are on every dial and are HEXADECIMAL. A phone number that has either the # or the * in it, is a number that must be related to the Technology-Specific or Service-Specific Area Code.

216. As for the PRIVATE HEXADECIMAL PHONE NUMBERS, we don't want you to be able to dial these NUMBERS. This is a part of the whole scheme of things we assert herein. No need for pay PHONE blocking on toll free NUMBERS that are PRIVATE HEXADECIMAL NUMBERS. No more vandalism calls or annoying calls to the alarm computer because this INDUSTRY will flock to the PRIVATE HEXADECIMAL NUMBERS, as it is a clear advantage, a good business choice.

217. No one can expect equipment manufacturers to produce equipment without firm understandings about what is available from the PHONE system. There will be some items of equipment that will only work on some digits and others on still other digits. I have been in contact with several manufacturers about this issue. Some say they are not sure and don't want to spend the money, because it's your move first.

218. EQUIPMENT MANUFACTURERS WILL COMPLY - As soon as the orders are issued and the phone company can demonstrate the numbers are on and operating,

every manufacturer of equipment indicated they would make the changes required to their various pieces of equipment, so that they could take full advantage of the Private HEXADECIMAL Phone number group.

219. I contacted several companies: AOL will move when the system is working, ADEMCO, FBI, and DSC Security will produce "HEX READY" equipment as soon as the system is operating and there is demand. Everyone I have contacted is excited about this Proposal and will cooperate on a prove-it-is-working basis, and then, they will make the equipment needed.

220. URGENT REQUEST FOR TEST LINES - Nothing can be tested for application without the existence of test lines. Urgent request is made for establishing a test location in San Diego at 619/231-123(B=*), 619/231-123(C=#), 619/231-123D, 619/231-123E, 619/231-123F, 619/231-123(Ø =true zero).

221. These lines should have recordings that say: "Hex test line B star was successful" then repeat the message until caller hangs up. This is to be repeated for lines (*=B), (#=C), D, E, F, and Ø (true zero) so that modem computer calls, alarm calls, point of sale calls, pager calls, and voice mail calls can each confirm success with their PRIVATE equipment using the full HEXADECIMAL system. These lines should be setup so that no toll is reported to the caller's bill.

222. Modem tests (and all other types) will confirm that the modem can dial the test NUMBERS by having the tester person listening in on the line and making confirmation aurally. This is simple and avoids the need for specific "receiver" types of equipment attached to several lines that will "fully function" based upon which system is being tested, which would be beyond reason to ask Pacific Bell to provide. This method will allow 99.9% testing of all systems without the need for having a alarm receiver on the line or a point of sale receiver on the line and so on, which would of course, provide 100% testing.

223. After confirmation of the abilities of equipment to dial the hex NUMBERS, manufactures will begin ordering their customer's lines and start using the hex NUMBER PHONE lines, freeing the existing DECIMAL NUMBER PHONE lines for assignment to the PUBLIC.

224. Keep in mind, the Savings Account story, it will take years for users to migrate to hex NUMBER usage, but it will not begin to happen until we open the gates.

225. ALLEGIANCE TO NO ONE - The PUBLIC owes the Telephone Company nothing. We have allowed our alleged agency to sleep as the PHONE Company comes begging for the PUBLIC to pay for equipment properly the obligation of the PHONE Company. Touch Tone should never have been charged to the PUBLIC. Buy it yourselves!

226. Gas stations were told you will change or close. They went out and paid for the required improvements so why should the PHONE company even ask for payment. Go do it yourself. I have been a visitor at several telephone company establishments. We owe you nothing, living so high on the hog, plush elegant surroundings, If the PUBLIC knew how lavish your offices are, they would be furious with such wastes of our hard earned money to pay for the PHONE bill each month.

227. NUMBER SYSTEM DESIGNATIONS - we need a simple way to designate the NUMBER set we are talking about in this proposal for rule making.

228. This is a problem because the NUMBERS used in the PHONE system are said to be "dirty." This stems from the problems resulting in mixing pure DECIMAL sets with partial DECIMAL sets and partial HEXADECIMAL sets and pure HEXADECIMAL sets. It sounds more complicated than it really is for the average person.

229. The set we call pure DECIMAL is: \emptyset , 1, 2, 3, 4, 5, 6, 7, 8, 9.

230. The PHONE set is: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0=A, *=B, #=C.

231. The set we call pure HEXADECIMAL is: \emptyset , 1, 2, 3, 4, 5, 6, 7,
8, 9, A, B, C, D, E, F.

232. Note the use of \emptyset as true zero, 0=A=10, *=B=11, #=C=12 and the significance of location (where is the zero) in the set string of these characters. So, how to deal with these without requiring full definitions in every line of text?

233. I will refer to DECIMAL NUMBERS as: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0=A, the present NUMBER assignment set now in use.

234. I will refer to PUBLIC HEXADECIMAL NUMBERS as: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0=A, *=B, #=C, the proposed, limited use of a partial HEXADECIMAL NUMBER set, all of which are on the existing PHONE pad.

235. I will refer to PRIVATE HEXADECIMAL NUMBERS as: Ø , 1, 2, 3, 4, 5, 6, 7, 8, 9, 0=A, *=B, #=C, D, E, F, the proposed full use of the HEXADECIMAL set. All characters are not on the PHONE pad, but can be used and programmed in various ways by several types of equipment.

236. HOW PUBLIC AND HOW PRIVATE - The terms PUBLIC and PRIVATE do not mean that these are somehow truly PRIVATE NUMBERS. It is just a way to simplify what is being talked about in a simple and convenient way.

237. The proposed INDUSTRY classification of service will be tariffed for both PUBLIC and PRIVATE HEXADECIMAL NUMBERS. All you get is a PHONE line with a dial tone. No other services (411, yellow pages) or features (call waiting) are to be provided in this class of service. Call forwarding should be available for safety reasons.

238. CONTAMINATION DEFINED - A NUMBER is HEXADECIMAL if any part of it is HEXADECIMAL! So if the area code added as an overlay in the 213 area is 21F or the area code added to 415 is 41* then all, ALL NUMBERS under this area code are HEXADECIMAL, even when the NUMBER looks like 231-1313. All these NUMBERS exist, but never have been used. If the prefix and line NUMBER assignments are DECIMAL NUMBERS (which would be a simplification, by assigning these first) then we have just created 8 million new, never before used NUMBERS outside the DECIMAL area codes humans use. If the prefix and line NUMBER assignments are HEXADECIMAL NUMBERS then we have just created 268,435,456 lines for each area code. The general PUBLIC will never know about or use these NUMBERS. This is a profound realization you must embrace.

239. AB818 BACKGROUND - The author introduced this bill due to concerns over the proliferation of area codes in the last few years. The NUMBER of area codes in California has doubled since 1991. Today, telephone NUMBERS

are only assigned in blocks of 10,000 to the telecommunications service providers who request them. This is the case whether the service provider has 10 customers or 9,500 customers in the area served by that block of 10,000 NUMBERS. The federal Telecommunications Act of 1996 delegated full jurisdiction over "Numbering" issues to FCC. FCC has delegated to the states limited authority to implement area code relief by doing one of the following: a) ordering an area code split; b) ordering an overlay; or c) realignment of an existing area code boundary.

240. Last month, at long last, the CPUC filed two petitions with the FCC seeking additional delegation of authority in order allocate NUMBERS more efficiently and thus decrease the need to create new area codes in the state. The Technology-Specific or Service-Specific Area Code request to the FCC is exactly what this Hexadecimal Numbering System requires. But, why did it take you 15 years to request it?

241. And, how come numbers are not assigned on an individual basis, the same as is done with toll free numbers. I had toll free numbers in the early 1970s. The Phone Company decided on the number, based upon an elaborate formula. Today we select the number and the provider without interference or restriction. Now that we have advanced to this point, it is remarkable to again hear about all the restrictions and bulk (10,000) assignment requirements. I suspect this is fraudulent, a diversion to delay competition from advancing. Clearly, no one will change their business number to a different number as a requirement to conduct business with a different provider. This is not even a possibility, so why are they denying access? Follow the money!

242. HEXADECIMAL SOLUTION PERSPECTIVE - No one else has offered any solution anywhere near the effectiveness provided by INDUSTRY Service and HEXADECIMAL PHONE NUMBERS. This solves the NUMBER crunch and significantly extends time to the expected exhaust of NANP to nearly 100 plus years.

243. Historically, the uses of HEXADECIMAL NUMBERS, still in application today, may require some correction of bad choices previously made, if we are to realize our full potential goal of using all the NUMBERS available on the network. Contamination of NUMBER base must stop. Today we use the "0" zero which is actually a 10 or in hex, an "A." And the "*" is eleven or

in hex "B," then the "#" is used also, but true zero or zero slash is not used. These will continue to be used, and be expanded in their use, in this hex proposal.

244. We must require better utilization of this resource. The mandatory conservation of the broad spectrum of NUMBER applications in the North American Numbering Plan of the telephone INDUSTRY is no less significant than the very same practices of the Federal Communications Commission in regards to the Electromagnetic Spectrum for radio and television. Of course, this explains the absents of channel 1 on your TV, he said with a twinkle in his eye!

245. Significantly, INDUSTRY Service providing PRIVATE HEXADECIMAL phone numbers will be specifically denied publication and directory assistance services, as these "hex" NUMBERS are somewhat PRIVATE and are to be used by automatic equipment, not "digitally" dialed by a person, but rather by computers, alarms, point of sale reporting, and a multitude of other automated applications, and also used in NON-PUBLIC voice applications that may be "field" dialed as highway emergency Phones and elevator Phones, among others. These are NOT Vanity PHONE NUMBERS, but Hex NUMBERS.

246. Nothing will preclude the INDUSTRY PRIVATE use as in an "order" line for Circuit City stores ordering from their warehouse without PUBLIC interference as always develops in time with PUBLIC 800 NUMBERS, which then become clogged with "customers" inquiring about some concern they may have, even when given a PUBLIC 800 NUMBER to call for resolution of their issues. By using PRIVATE HEXADECIMAL NUMBERS for this application, almost no one will be able to dial the NUMBER even if they obtain it some way or other, yet legitimate company use is automated by pushing a single button, after the button is programmed into their PHONE'S memory.

247. In high-speed modem applications, INDUSTRY Service will provide special services available only by way of HEXADECIMAL PHONE NUMBERS. By grouping these services into one specific area of the switch room, better services can be provided by the phone company as a result of the technical advantages offered by requiring "this dial up service on this line" located in "this" area of the switch room. Keep in mind, these numbers are never

published, so number selection no longer matters, any old number will do for automatic equipment services.

248. If all America On Line customers and all other similar dial up network customers were REQUIRED to use hex PHONE NUMBERS for their access, then how many thousand PUBLIC NUMBERS would be freed for assignment for Business and Residence assignment? America On Line has not answered this question, so estimation is in order. In San Diego, could it be as high as 70,000 lines and growing, that is 7 prefixes saved and service is improved in the process, such a deal!

249. SERVICE SPECIFIC APPLICATIONS, WITH COMMENTARY AND ANALYSIS - As you know there are various kinds of service types available in California and the nation. This discussion will attempt to point out areas of conservation of NUMBERS that would apply to each service.

250. TOLL FREE - NUMBERS are provided by just about everybody including PT and GTE in state. All toll free NUMBERS, whether 800 or 888 or 877 or those newly proposed to be used 800/025 and 800/175 or 80C or 80D and so on; all these function in the same way. It is inexcusable for the PHONE Company to tell us that no 800 NUMBERS exist when they have not used 800/001-0000 for example. This is a perfectly good NUMBER group and should be assigned immediately. For simplicity, I will use just 800 in examples, but you must keep in mind, it applies equally well to all toll free area codes, including HEXADECIMAL toll free area codes.

251. The dialed NUMBER is translated to a pots NUMBER in a look up table at the call processing center and then the call is processed in the same way as all other calls on the network. Keep in mind, all NUMBERS in the toll free system are part of a national overlay that is broken down to a local NUMBER when it is translated. Some are terminated and some are dumped, more about this below.

252. If you dial 1-800/034-5678 or 1-80E/100-9876 or 1-888/445-#123 the call will be "looked up" at the call processing center and changed or translated to, for example, a pots NUMBER: 415/345-6789, then the call is completed in the normal way all calls are handled on the network.

253. There are several places where NUMBER conservation is not being practiced. If you dial American Airlines toll free NUMBER, 1-800/433-7300 this is translated to 213/255-1911 and is processed. Notice the fact that a caller never knows that they are being connected to 213/255-1911 and also, they will never know that instead they are being connected to 213/F11-0000 which is a PRIVATE HEXADECIMAL NUMBER that does not consume PUBLIC NUMBERS in the 213 area code.

254. And what about second lines and so on. Were a caller to request the NUMBER for American Airlines in Los Angeles using 411, they would get the NUMBER 213/445-1000. This NUMBER has 999 lines behind it: 213/445-1000 to 1999, as an example. Why should the PUBLIC NUMBERS 445-1001 and so on be used? They should not! They should be PRIVATE HEXADECIMAL NUMBERS.

255. All NUMBERS in a rotary bank should be HEXADECIMAL after the first NUMBER, or pilot NUMBER, which is the only NUMBER that is advertised or published or listed on directory assistance. Here, the first NUMBER is 213/445-1000 all the rest are to be 213/445-D444 and 213/445-D445 and so on. This simple act of moving second and up NUMBERS to PRIVATE HEXADECIMAL NUMBERS will make the utilization of plant equipment much higher and conserve PUBLIC DECIMAL NUMBERS for PUBLIC uses. Keep in mind, we have only 10,000 PUBLIC NUMBERS in an exchange, but we also have 55,536 extra HEXADECIMAL NUMBERS there also, all going to waste. Is it any wonder we now find ourselves in a number crunch?

256. Then there is the concept of a terminated line NUMBER and a dumped NUMBER. A very high percentage of toll free NUMBERS are used by the alarm INDUSTRY. This is true even in local areas, because there is a printout at the end of the month showing the exact time the call was placed to the monitoring station, and this can be used in court as very good evidence. Were the call to be received on a local line, no independent call time record would be available.

257. The alarm INDUSTRY greets the use of PRIVATE HEXADECIMAL PHONE NUMBERS with open arms as the advantages far out weigh other considerations. And the fact that this INDUSTRY has been using HEXADECIMAL NUMBERS for the last 25 years provides plenty of experience and know-how.

258. Toll free NUMBERS that are dumped onto local pots NUMBER are once again using PUBLIC NUMBERS where they should not be doing so for the conservation of NUMBERS to be effective. These local NUMBERS can and should be HEXADECIMAL NUMBERS.

259. Toll free NUMBERS that are terminated as a local pots NUMBER are also wasting the PUBLIC NUMBERS available. They can and should be PRIVATE HEXADECIMAL PHONE NUMBERS.

260. All these NUMBER translations are transparent to the user, so why not put all the translations in the HEXADECIMAL part of the available NUMBERS in every exchange. Keep in mind the black piano key concept earlier in this writing.

261. BUSINESS SERVICES NUMBERS - The 900 pay for services NUMBERS are exactly the same as the 800 NUMBERS discussed above, except you pay for these services. So they can be made to use HEXADECIMAL Numbered lines in the very same way.

262. LOCAL NUMBERS - Mostly covered above, you can see that in situations where a lot of NUMBERS are used in a rotary bank, all but the first NUMBER can be HEXADECIMAL with no change in service or even knowledge by consumers that this has taken place.

263. Business with 5 or more lines should be the initial target of change to HEXADECIMAL NUMBERS. Some changes to services, such as Centrex, can be made at the switch room. In some situations, a very big board is provided with a button for each PHONE and the person answering incoming calls pushes the button of the desired extension to complete the call. These do not need to be changed in any way. By selecting a HEXADECIMAL NUMBER series like 234-F111 to whatever, only the 111 need be on the board, as this is known as "line NUMBER" one eleven, or extension 111. The first part of the NUMBERS is not even on the tag, because they won't fit, it's too small! Here we have an opportunity to cooperate in number selection.

264. PAY STATIONS - If you can't receive return calls on this PHONE, then make the NUMBER PRIVATE HEXADECIMAL in the first place!!!!!! I think this

idea of not allowing return calls is worth less than the 35 cents allowed for using the PHONE and so should require a lower rate. A lot of business people do not feel they can afford the high cost of cellular Phones. My first month bill was \$742.38 and I nearly died when I got it!

265. Yes, Dorothy, there are people without Phones, alive and well in this state. And, no they are not drug dealers! These people need to be able to page their boss to see if he has work for them today, but the CPUC has destroyed this man's job possibilities by blocking pay PHONE call backs.

266. And when we all get the big one, the earth quake of all mothers, you may very well wish the PAY STATION allowed call backs, as it may be the only life line you have to the rest of the world. Remember, in a catastrophe, weird things happen. A one thousand pair cable is cut, but only 4 lines still work! I'll bet you wish to God that pay PHONE is on one of those 4 lines and THAT IT allows callbacks.

267. EMERGENCY ADVANTAGE AT LONG LAST - When California has another earthquake of a magnitude of 4.5, an electromechanical switch located in the switch room of all PHONE companies will trigger a change in the computer program subroutine that will prevent all calls except PRIVATE HEXADECIMAL Numbered calls. This will allow emergency calls to get through by blocking all other calls.

268. ALARM SIGNAL LINES - In some installations, the business or premise PHONE line is not shared with the alarm signal line. In schools and various industries, jewelry, diamonds, etc. the alarm has its own, dedicated line for its exclusive use. These alarm, fire, burglary, holdup lines should be HEXADECIMAL PHONE Numbered.

269. This same criterion applies to Call Box Signaling, Elevator Phones, and Freeway Emergency Phones - all should be HEXADECIMAL Numbered.

270. Computer Bulletin Boards, Computer Accesses to AOL and others should all be HEXADECIMAL Numbered.

271. Credit card verification and Point of sale systems, all can use

HEXADECIMAL PHONE lines freeing the PUBLIC lines for PUBLIC uses.

272. Voice Mail can use the PUBLIC HEXADECIMAL NUMBERS and free DECIMAL NUMBERS for PUBLIC uses. And pages that are automatically included in the message or simple tone pages can all be PUBLIC or PRIVATE HEXADECIMAL NUMBERS.

273. MILITARY AND PUBLIC EMERGENCIES - If you think we are all safe from terrorist attack, think again. It will happen and it will be a disaster on a scale we have yet to imagine. Whenever nature is involved, as in a forest fire, we come to see just how small we are in the overall picture of things. The only effective weapon is to fight fire with fire. When a biological attack is made, nature takes over and we will be helpless to fight this monster. Just ask any biology major about it!

274. The need to have reliable communications will be the subject of extended discussion after the fact, by those who live on, because no calls will be successful using the DECIMAL PHONE system. Too many people will chat and chat and chat, preventing the system from being able to handle the needed emergency calls.

275. We can program the PHONE system to respond only to PRIVATE HEXADECIMAL PHONE NUMBERS. These calls can be made to work, for example, from hospital to hospital with no problem, provided you can get the PUBLIC off the PHONE so the system can handle these emergency calls.

276. By denying the completion of PUBLIC DECIMAL and PUBLIC HEXADECIMAL calls, you free up the system to handle PRIVATE HEXADECIMAL calls, which with the limited functioning system, have a much better chance of completion.

277. OTHER PHONE COMPANIES - The telephone system is experiencing some change by way of opening the business to other phone companies. The two major companies, Pacific Telephone and General Telephone now have competition of sorts. In passing, these two have refused to cooperate to the satisfaction of the CPUC and as a penalty, have been denied the right to offer long distance services. This is somewhat of a diversionary tactic and writing all in itself. I have to stop somewhere so; this is all I will

have to say about that subject.

278. This Proposal you are reading, the expanded use of HEXADECIMAL numbers does not affect these other companies in any way, except that they too must offer HEXADECIMAL numbers, in the same way as the big boys are required. If they are allotted 10,000 lines or just 1,000 lines are assigned for their use, they still have usable and assignable Public and Private HEXADECIMAL phone numbers in every group of numbers.

279. Suppose they are given 213/305, decimal, included is 305-*123 and 305-#678, and 305-DDDD to FFFF HEXADECIMAL. Or, if they are given 619/445-1000 to 445-1999, decimal, they still have both Public and Private HEXADECIMAL numbers to be assigned as in 445-1*34 or 445-10#3 and they also have 445-1DDD to 445-1FFF for Private HEXADECIMAL assignments.

280. Are you beginning to see the marvelous advantages of this HEXADECIMAL system? As I said, HEXADECIMAL numbers are everywhere, in every exchange and line number and in every area code and they are free!!!!

281. HEARING IMPAIRED COMMUNICATIONS - These devices can be Public HEXADECIMAL or even Private HEXADECIMAL all to their advantage. Since no unwanted calls by the general public will be accidentally made into this system. Yet another advantage of number choice!

282. CORPORATE PLANTS AND SECURED LOCATIONS - Many national companies do not allow PRIVATE calls from corporate locations and maintain complete control on calls incoming. Secure locations, research centers and the like, have the same obligations to maintain control of their call traffic. All these are candidates for PRIVATE HEXADECIMAL PHONE NUMBER assignments, except for the single PUBLIC DECIMAL incoming lines to operators, who will make the connections they decide, are warranted and necessary and that do not breach security.

283. If you remember some time ago, when touch tone was first coming into use, we had a push button tone pad along side the rotary dial phone. We had to use the rotary dial to make the call, but could use the tone pad to signal some features, once the call was established. We do have telephone HEXADECIMAL tone pads that allow complete PRIVATE HEXADECIMAL NUMBER

calling. These are useful in secured locations and under emergency conditions, but should not be made available to the general PUBLIC.

284. PHONE COMPANY BUSINESS OFFICES AND REPAIR SERVICES - when you call the 811 NUMBER or the 800 NUMBER or the 611 NUMBER, they are all translated to pots NUMBERS. Those NUMBERS should be PRIVATE HEXADECIMAL NUMBERS.

285. EMERGENCY SERVICES - When you dial 911, it is translated to pots NUMBERS. Those NUMBERS should be PRIVATE HEXADECIMAL NUMBERS, not DECIMAL NUMBERS.

286. PUBLIC INTEREST, CPUC, ALJ, AND FCC; State and Federal Elected Officials - We all have the obligation to keep in mind that these government agencies exist to serve the PUBLIC interest. They are here to serve us and to control the telephone companies in what is our view of desirable functioning. There are gaps in this fabric; some would even call them rips.

287. FRIED GREEN HEXADECIMALS SERVED ON TOAST - A menu of possible solutions presents a problem for those not sufficiently informed as to what each listing is and the ramifications of ordering this item over that item. Even at this rather low level, no one on this list is expected to have extensive experience in computers and telephones and communications unless they were trained in these subjects. Most are attorneys, with only limited experiences and understandings about the subject at hand. Some may have access to experienced consultants, and for those with this help, I urge you to independently confirm my points and theories. If I have made a mistake, please do let me know about it, to be silent would be to accept an error. But, do your homework first!

288. The mistake made in the Apple Computer vs. Microsoft case about their interface was that the Judge did not understand what the case was about and the devastating destruction to Apple, brought on by his erroneous decision. I will not make that mistake in this presentation! The audience on this FCC list is diverse and interested, but may not be well informed, so let's hold class!

289. Mathematical Set Theory - Set theory has been around for a long time

and was taught as an elective during my undergraduate time at the University of Kansas, in 1959. Your kids have this same information today in high school. Ask them!

290. The Set is just a name for the characters or NUMBERS to be used to express something. In the case of words, in the English language, the set is the alphabet (ABC and so on).

291. The DECIMAL NUMBER set is just (\emptyset , 1, 2, 3, 4, 5, 6, 7, 8, 9). Their is a Binary NUMBER set (\emptyset , 1), and an Octal NUMBER set (\emptyset , 1, 2, 3, 4, 5, 6, 7). Notice the derivation of the words that are used to describe the various sets and the Base we define to be: Bi- for Base 2, Oct- for Base 8, and Dec- for Base 10.

292. The present PHONE system is contaminated and is said to be "dirty." You may think it is DECIMAL or Base 10, but that is not exactly correct.

293. TELEPHONE COMPUTER PROGRAMMING - I have no intention of allowing the PHONE company interests to cry about the millions of dollars they want to snow us for the costs of programming to implement the HEXADECIMAL NUMBER assignments and limit emergency access that I propose.

294. A short class in programming. The telephone computers are programmed in UNIX, a sophisticated computer language. Although not near for word, the following is a simple example of how to extend the input to allow for all the HEXADECIMAL digits and to allow for control of calls during an emergency. At the present time, if you dial a NUMBER 234-#789 or use the * in a NUMBER, you will get a reject recording telling that the NUMBER can not be completed as dialed. Here is how that is done and the emergency call situation is also shown:

295. LINE NUMBER then INSTRUCTION (IN CAPS) WITH VARIABLES (lower case) then MY COMMENTS.

296. 1 IF off hook THEN give dial tone ELSE continue

297. COMMENT: THIS IS AN IF, THEN, ELSE INSTRUCTION. IF YOU TAKE THE PHONE IN HAND, IT IS SAID TO BE "OFF HOOK" AND YOU NEED TO HEAR A DIAL TONE, "give dial tone." (Passing note: In an emergency, this is where people fail

to wait for the dial tone, which tells you that the computer is ready to accept your dialing. If you dial without the dial tone, your call will not be processed.) IF THE PHONE IS NOT IN YOUR HAND, THEN NO SERVICE IS NEEDED, SO THE COMPUTER WILL GO ON TO THE NEXT PERSON NEEDING A DIAL TONE, this is the "continue" part. GO READ LINE 3.

298. 2 RESERVED FOR BELOW DISCUSSION

299. 3 INPUT x AND GOSUB test

300. COMMENT: THE SYSTEM WAITS FOR A DIAL TONE THEN ALLOWS INPUT OF THE FIRST DIGIT YOU DIAL AND THEN GOES TO A SUBROUTINE NAMED "test" GO READ LINE 10

301. 4 MOVE x TO digit string AND ADD 1 TO count

302. 5 IF count = 7 THEN GOTO process call ELSE GOTO LINE 3

303. COMMENT: HERE THE DIGIT YOU DIALED IS ADDED TO THE NUMBER STRING AND A DECISION IS MADE ABOUT ARE THEIR ENOUGH DIGITS TO COMPLETE THE NUMBER. IF YES, THEN THE CALL IS PROCESSED (NOT INCLUDED) IF NO, THEN GET ANOTHER DIGIT BY GOING TO LINE 3, Go to line 22.

304. 10 SUB test

305. COMMENT: THIS SUBROUTINE CHECKS FOR A GOOD DIGIT. READ 11.

306. 11 IF x IS LESS THAN 1 OR MORE THAN 10 THEN

307. GOSUB recording reject ELSE RETURN x

308. COMMENT: THE DECISION TO ACCEPT THE DIGIT OR PLAY A RECORDING IS MADE HERE. IF THE DIGIT IS IN THE RANGE (1,2,3,4,5,6,7,8,9,or 10) THEN IT IS A GOOD DIGIT AND WILL BE MADE A PART OF THE NUMBER BEING DIALED. WHEN 7 DIGITS ARE RECEIVED, THE CALL IS PROCESSED (NOT INCLUDED). IF THE DIGIT IS OUTSIDE THE RANGE ALLOWED, THEN A RECORDING IS PLAYED, GO READ LINE 20 OR GO TO LINE 4

309. 20 recording reject

310. 21 PLAY rejects recording THEN disconnect caller AND continue

311. 22 END

312. This is the end of the demonstration computer program. All the above takes place in milliseconds, but you can act it out and understand how it is done. As you can see, it is really not all that hard to understand. If you are smart enough to write a legal brief, then you are smart enough

understand this program. Here are some options for your consideration.

313. If a decision is made to implement some form of emergency control as a direct result of using HEXADECIMALS, then this is part of how that can be done. Replace the lines above with these lines, NUMBER for NUMBER:

314. 2 IF dialtone THEN read caller NUMBER

315. COMMENT THIS IS WHERE A TEST OF THE CALLING PARTY NUMBER CAN BE MADE TO PREVENT USE DURING AN EMERGENCY

316. 3 IF caller NUMBER IS NOT PRIVATE HEXADECIMAL THEN continue

317. Here the test is made about the source of the call, the caller's NUMBER. If this call is from a PRIVATE HEXADECIMAL NUMBER, then allow it to be processed, otherwise go to the next off hook line, by executing the instruction "continue."

318. Another way to accomplish emergency control is to test to see if the digits dialed are 911, in that order. This additional line of code would be required in line NUMBER 12.

319. 12 IF x(1) IS NOT 9 THEN continue

320. COMMENT THIS WILL CHECK TO SEE THAT THE FIRST DIGIT x(1) IS A 9 AND SIMILAR AND SLIGHTLY COMPLICATED ADVANCES ARE REQUIRED TO SEE TO IT THAT THE NEXT DIGITS ARE 1 AND 1, BUT THIS CODING WILL BE ONLY MORE CONFUSING TO MOST OF YOU AND I HAVE LEFT IT OUT.

321. So how do we change from DECIMAL NUMBERS to HEXADECIMAL PHONE NUMBERS? Here is the MAIN reason I provided all this programming. In line 11 make this simple change:

322. 11 IF x IS LESS THAN 1 OR MORE THAN 10 THEN

323. GOSUB recording reject ELSE RETURN x (DECIMAL only)

324. 11 IF x IS LESS THAN 0 OR MORE THAN 15 THEN

325. GOSUB recording reject ELSE RETURN x (HEXADECIMAL)

326. COMMENT: THE RANGE OF TEST DIGITS IS CHANGED FROM (1 TO 10) TO (0 TO 15). NOW HOW LONG DO YOU THINK THAT TAKES AND HOW MUCH WILL IT COST?

327. It is just that easy! You just did it, yourself! So don't allow the PHONE Company to tell you it will take months and cost millions. Such a claim is a lie. See it for yourself - go back and re read it. It takes less time to do than it takes to write about doing it!

328. I know the Telephone Company will cry and try to drink at the money trough. They will try to tell you that this change will take more than 2 months to implement. Now that you are educated about that scam, don't even give them consideration; let them know, now that you are smarter than that!

329. Then, they will claim it will cost millions to implement, but where and why and for what reason. You just did it and it cost less than the time it took me to write about it.

330. All the phone company computers are connected and one change is automatically incorporated in all processing centers and switch room computers immediately (as fast as you can send an email). And it doesn't cost a penny to transmit the information in the program.

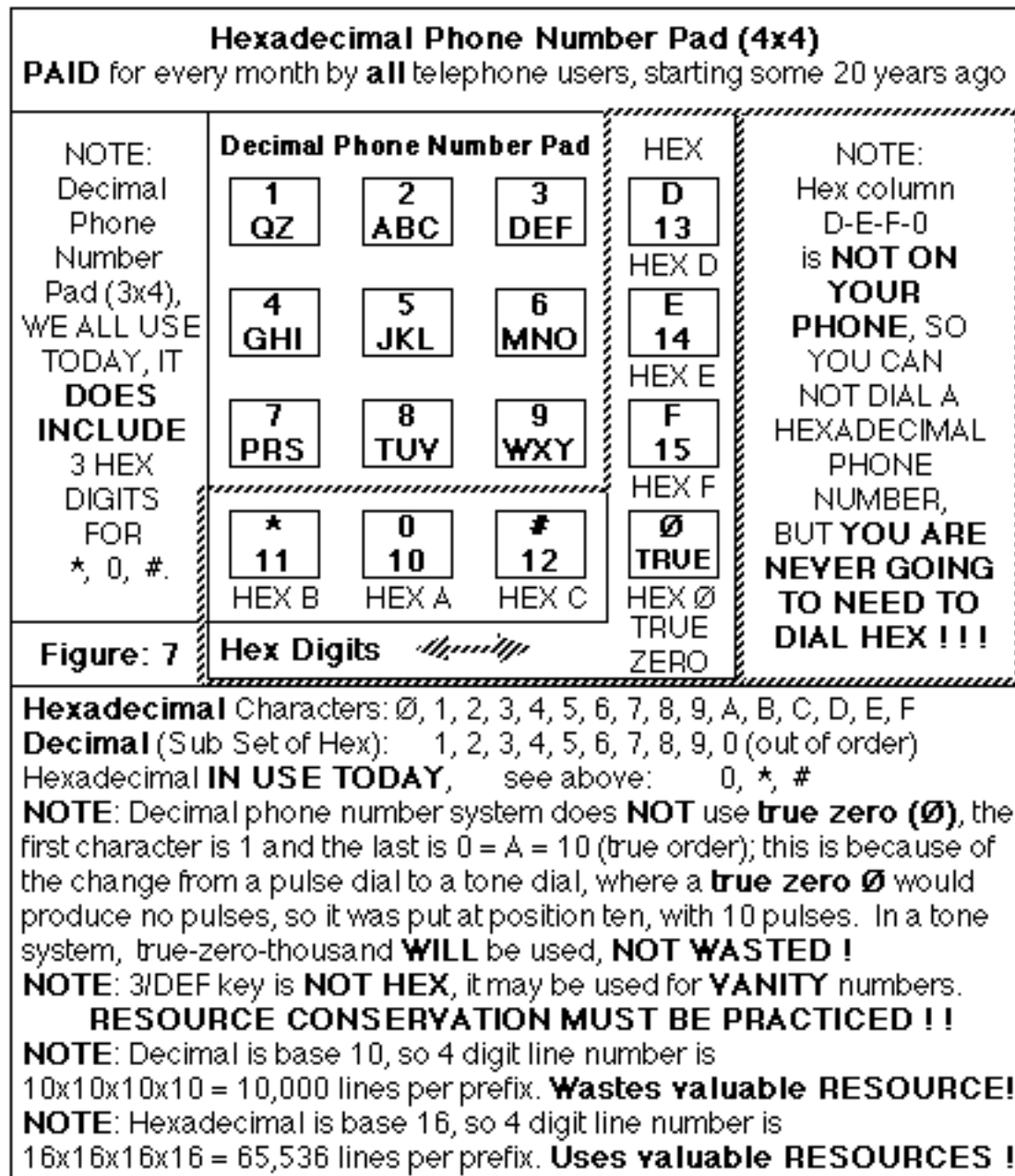
331. If you would like to learn about the cost scam to provide call waiting for \$3.50, when a cost of \$0.35 would EVEN be excessive, write me.

332. NIGHTMARE ON TONE PAD AVENUE - You will be surprised at what can be found in an alley, besides the obvious junk and debris, there are tone pads that are inconsistent! Looking at the stock telephone pad on every PHONE in America, we see that the digits increase from left to right and then drop a row and increase from left to right and drop a row and OOPS - they don't increase from left to right, it is not ABC it is BAC.

333. Then there is the drawing I made to show and tell people about how the column of four buttons to the right is missing from your PHONE. I made the buttons DEFØ using the logic that they increased in the column and after the F was a loop around to pick up the lonely true Ø button. This may be wrong! This is but one of the sources for my steadfast comment that the phone companies lie about information or just refuse to provide it, but not to worry, as you will see by reading on.

334. DIAL PAD RELATIONS WITH THE COMPUTER - When a button is pushed two tones at the frequencies corresponding to the intersection of the vertical and horizontal lines are produced.

///



335.

336. Figure 1: Dual Tone Multiple Frequency Tone Pad showing HEXADECIMAL DIGITS.

337. Equipment at the switch room senses the frequencies of the tones and determines the dialed digit. This is a piece of equipment known as TONE 2 DIGIT and it captures the digit and gives it to the input of the computer. This is the DTMF system or touch-tone.

338. The fourth vertical column at the frequency of 1633 Hertz per second

is the main subject of this writing. Note that the lower row shows that we have been using HEXADECIMAL digits for a long time, 0 from the very start, and also * and #, all from when we all first paid for this base 16 system!

339. If you push two buttons in a column or row, both at the same time, you can hear a single tone. Some enterprising players can play a musical tune on the pad.

340. WHY NOT MORE DIGITS - The phone at home and elsewhere is linked to the computer located at the switch room by way of a twisted pair of wires. Tests were run to determine the frequency response of this twisted-pair based link to the switch. The reason was the need to determine the frequency limits that could be reliably used for digits defined by way of tones on the line.

341. This is how the $4 \times 4 = 16$ tone pad and the frequencies were decided upon. One may question, why not have many more tones for the whole alphabet on the line, say $7 \times 7 = 49$, including all the digits, numbers, and punctuation on a tone pad? The reason is that the extra tones will not be successful in reaching the switch room and therefor it is not an acceptable system.

342. In contrast, using a phone system that is coaxial wire based, as is the cable television system and offerings from Cox Communications and others, there is virtually no limit on the frequency range for phone tone digits and all the alphabet and then some could be toned with ease. But, this is not yet acceptable, since we must address the needs of all America, which is almost entirely two conductor, twisted wire.

343. ISSUE PROFILE - We have the newly proposed Industry Class of service, which includes all locations of the Business Class and all locations of the Residence Classes of service.

344. The "digit symbols" here after referred to only as digits, are included in classes of service and consist of
 $\emptyset, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F$. Where the \emptyset represents true zero. Readers should keep in mind that digit 0 on your dial is actually HEXADECIMAL A or 10 in decimal, that symbol * on your dial is actually HEXADECIMAL B or 11

in decimal, that symbol # on your dial is actually HEXADECIMAL C or 12 in decimal.

345. As you can see, we have several columns of information to get clear:

346. DECIMAL, HEXADECIMAL, BINARY CODED DECIMAL, TOUCH-TONES, PHONE PAD, BELL LABS, SYMBOL, ALPHABET, and CHANGES NEEDED SOON.

347. WARNING: Reminder, the ALPHABET column is for perspective only, it is the source of vanity phone numbers, AND IS NOT THE SUBJECT OF THIS WRITING!

348. Such vanity numbers as 415/CALL CPUC, for example, which in phone number digits is 415/2255 2782, or 415/225-5278 with a spill over digit of 2. This is in part, the reason why the invention called Smart Dialing, ending the number in a 0 or 1 or 2 to indicate the overlay area code will fail, it is not NANP compliant, so it has no chance for adoption. It is nevertheless, a good idea to be offered as a feature in accessory equipment that is not under the CPUC or FCC control.

349. REQUEST: We need to have the phone tone pads changed to accommodate the letters Q and Z and to have the HEXADECIMAL digits placed upon the dial as in 0/A, */B, & #/C, do this when repairing phones or on new phones.

350. Many cellular and other portable wireless phones correctly display the * as a B, and the # as a C, already!

351. TABLE 1: == PHONE SYSTEM SYMBOL TABLE ==

DEC	HEX	BCD	TONES	PHONE	BELL LABS	SYMBOL	ALPHABET	CHANGES
(10)	(16)	(2)	DTMF (Hz)	(10?)	(Mixed)	(2)	(26)	NEEDED
101	16	8421	Low+High	1	1&Alpha	1	1	SOON
- =	Ø =	0000 =	941+1633	-	%D <not hex>			
1 =	1 =	0001 =	697+1209	1	1			Q Z
2 =	2 =	0010 =	697+1336	2	2		A B C <not hex>	
3 =	3 =	0011 =	697+1477	3	3		D E F <not hex>	
4 =	4 =	0100 =	770+1209	4	4		G H I	
5 =	5 =	0101 =	770+1336	5	5		J K L	

6 = 6 = 0110 = 770+1477	6	6	M N O
7 = 7 = 0111 = 852+1209	7	7	P R S
8 = 8 = 1000 = 852+1336	8	8	T U V
9 = 9 = 1001 = 852+1477	9	9	W X Y
10= A = 1010 = 941+1336	0	0	OPER 0/A
- = B = 1011 = 941+1209	*	*	*/B
- = C = 1100 = 941+1477	#	#	#/C
- = D = 1101 = 697+1633	-	%A <not hex>	
- = E = 1110 = 770+1633	-	%B <not hex>	
- = F = 1111 = 852+1633	-	%C <not hex>	

352. Descriptions and Definitions for this Phone System Symbol Table:

353. DEC ----- decimal, () base 10, position weight 10 1

354. HEX ----- HEXADECIMAL, () base 16, position weight 16

355. BCD ----- binary coded decimal, () base 2, position

356. weight 8 4 2 1

357. TONES -DTMF- Dual Tone Multiple Frequency, in Hertz, Lower & higher band

358. PHONE ----- tone pad, () base modified 10, position weight 1

359. BELLLABS --- 16 button (4x4) pad, () base 10 & ??, uses ABCD in column but ==DANGER== DO NOT MIX UP THESE WITH TRUE HEXADECIMAL ABCDEF

Look at last line: - = F = 1111 = 852+1633 - %C <not hex> see how F is not equal to %C. Percent symbol is used to keep them different along with <not hex> notations

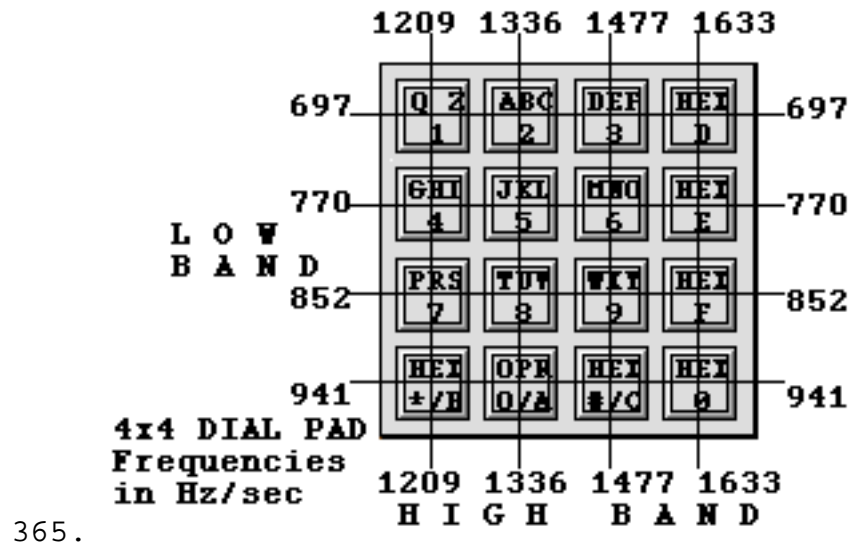
360. SYMBOL ----- hieroglyphic drawings, meanings for star and pound

361. ALPHABET --- Arabic alphabet, used for vanity phone numbers

362. CHANGES ----- needed changes to update dial buttons on new phones by adding QZ on button 1 and 0/A on button 0 and */B on button * and #/C on button #

363. <not hex>--- means not HEXADECIMAL (in this direction)

364. Yes we have three ABCD's, but the percent (%) symbol does count and so does the <not hex> notation, as in the vanity alphabet column



366. Figure 2: Dual Tone Multiple Frequency Tone Pad showing all 16 digits with intersecting frequency lines.

367. Notice how all-4 positions are fully used for the HEXADECIMAL representation and all tone crossings are fully used. Neat, don't you think! Nothing goes to waste.

368. NOTE 1. The current system, DEC for DECIMAL, is wrong. It is not strictly DECIMAL; rather it uses HEXADECIMAL 10 and does not use true 0 at all.

369. NOTE 2. The tone combinations, I selected; and the corresponding digit locations, I selected. The correct combinations that the PHONE company input (tone 2 digit) equipment is actually set to detect needs to be determined. The contacts I have made at the phone company lie about what is and is not, and so I must call your attention to this in the hope that someone at the PHONE company will answer these questions, truthfully and completely for us all, on paper and in the sunshine AND ON THE RECORD!

370. NOTE 3. The true locations of the digits and their tones is NOT left up to me or you, they are specifically defined in DTMF and CAN NOT be changed; but this will NOT a problem for anyone.

371. As far as what button produces what tone and is in what position is

concerned, the above tone lines should be thought of mostly as a logical definition. A circuit board will be used and the wires of the circuit are not in straight lines, as is so neatly shown above. Any tone combination can be made to be created by any button, in any location, the problem is, we sure don't want to recall all the 100 million Phones in America to get the HEXADECIMAL system in operation. So, until the PHONE company finally gets to print a response to this proposal, we all will hold our breaths for the final truth, and go from there.

372. If you would not be forgotten,
373. Soon as you are dead and rotten,
374. Either write things worth the reading,
375. Or do things worthy of the writing.
376. (Ben Franklin, Poor Richard's Almanac)

377. OK, OK, so let us give them a chance.

378. TOO MANY NUMBERS - There will never be another crises involving area code assignments or creations or any other NUMBER crunch situation, because several companies are working on single line access for all services. And with the use of HEXADECIMAL NUMBERS, we have far too many NUMBERS as of today.

379. Base 10 DECIMAL

380. 1-000/000-0000 to 1-999/999-9999 provides 10 Billion NUMBERS

381. Base 16 HEXADECIMAL

382. 1-0 0 0 /0 0 0 -0 0 0 0 to 1-FFF/FFF-FFFF provides 1100 Billion NUMBERS

383. This is 110x as many NUMBERS when using HEXADECIMAL NUMBERS.

384. On a line NUMBER basis, 10,000 goes to 65,536 or 6.6x as many, when using HEXADECIMAL NUMBERS.

385. The issuing of only 10,000 NUMBER blocks or prefixes to telephone company competitors, thus opening access to these other telephone companies, is another telephone company scam.

386. The computer assembles the bill for each NUMBER and there is no reason whatsoever for not allowing any NUMBER to be made available by any provider and for the billing and control to be done by the provider of choice.

387. This is the same nonsense that we had with toll free NUMBERS in 1970's, where we had to use the NUMBER the PHONE Company picked for us and no choice was available. After much complaining, this was changed.

388. Americans do not like the idea of forcing people to move from one NUMBER to another, but you will save money if you do move. This will encourage people to move from digital to HEXADECIMAL.

///

=====

389. ----- Part 3 Conclusion and Recommendations -----

=====

390. --- CONCLUSION ---

=====

391. P R O A N D C O N - a discussion of the points of interest

392. Pro:

393. The ONLY proposed solution with any merit is using HEXADECIMAL PHONE NUMBERS, because it is more efficiently using the area codes, prefixes, and line NUMBERS that we already have in place.

394. The HEXADECIMAL proposal helps to extend the life of the NANP by 80 plus years with no new area codes required.

395. The HEXADECIMAL proposal will apply to area codes and prefixes as well as line NUMBERS, so a new area code, 2*3 is no problem, as well as 213/4#5, this is no problem either. And 213/445-#492 is easy to use for the PUBLIC to be able to page or fax from existing PHONE button pads.

396. The idea of assigning some systems to more new DECIMAL area codes does not provide any relief to the system now or in the 20 or fewer years left before exhaust. However, see above for assignment to HEXADECIMAL digits, which does provide relief.

397. There is no cost to the PHONE companies using the HEXADECIMAL proposal.

398. Con:

399. Expect the PHONE Company to oppose and fight this legislation vehemently.

400. COMPLIANT, COMPATIBLE, CONFIGURABLE, AND CONFOUNDING - In this HEXADECIMAL SYSTEM, all these are

401. Compliant:

402. Is compliant with NANP

403. Is compliant with Network Bandwidth

404. Is compliant with PUBLIC Interest

405. Is compliant with Military Needs

406. Is compliant with State PBX

407. Is compliant with International Calling

408. Is compliant with Y2k

409. Is compliant with General Audience (G Rated) Web Site

410. Compatible:

411. Is compatible with Pay Phones and displays

412. Is compatible with Desk Phones and displays

413. Is compatible with Cellular Phones, PCS, Analog and Digital

414. Is compatible with Auto Dialers Independently Supplied

415. Is compatible with Fast Dial 8 and 20, PHONE Company Provided

416. Is compatible with Programmable Display and Dialers

417. Is compatible with PUBLIC HEXADECIMAL Controls (*70, *69, etc.)

418. Is compatible with PUBLIC HEXADECIMAL PHONE NUMBER Dialing

- 419. Is compatible with Existing Tone Receivers (tone 2 digit) at CO
- 420. Is compatible with Tone Pagers
- 421. Is compatible with Voice Pagers
- 422. Is compatible with Voice Mail and with Automatic Paging

423. Configurable:

- 424. Is configurable with Line Cards (DECIMAL to HEXADECIMAL) at CO
- 425. Is configurable with Alarm Controls, Local Program Panels
- 426. Is configurable with Alarm Control Panels, Up and Down Loading
- 427. Is Configurable with Computer Modems
- 428. Is configurable with Point-of-sale Terminals

429. Confounding:

- 430. Why California Assembly does not have Experienced Consultants
- 431. Why FCC / CPUC does not have knowledgeable leadership
- 432. Why FCC would not embrace All the Above
- 433. Why NONE OF THE ABOVE answer their mail!

434. What has FCC allowed CPUC to do? Legalese of Communication Act of 1996, and 1934 and Orders of FCC and CPUC. Touch Tone is free, we all paid for it and some will sue for trillions in damages. Communications Act does not specify no PUBLIC hex - its on every dial PHONE in America, how what basis this is compatible with PUBLIC hex dialing

435. Installation fee pays for all equipment, line, cable, line card, so why is there a fee for hex.

436. Capitalization of Plant Equipment is inflated so bill is inflated to show a 10% return on investment. A Fraud.

437. So when and for what reason will someone in South Africa be unable to call a PUBLIC HEXADECIMAL pager or voice mail? These are domestic needs that surly out weigh the remote possibility of an incompatibility with a foreign interest. Let them pay a surcharge of \$5.00 per month for a DECIMAL pager or voice mail NUMBER that is a Public Decimal Number.

=====

438. --- RECOMMENDATIONS ---

=====

439. TELEPHONE EQUIPMENT MODIFICATIONS - The only suggestion is for a change in the buttons on all PHONE tone pads. The change should be to replace the * with */B and 0 with 0/A and # with #/C because this is in truth, the NUMBER symbol that is actually being dialed.

440. A manufacturer of PHONE equipment will surly produce an add on tone pad that has only four buttons in a column, representing the buttons: HEX/D AND HEX/E AND HEX/F AND HEX/Ø . These add on pads should not be of interest to the PHONE company or the PUBLIC since they are for PRIVATE HEXADECIMAL uses.

441. Nothing in this section is to be considered a barrier to the immediate introduction of HEXADECIMAL PHONE NUMBERS. The general PUBLIC will not be inconvenienced in any way by these issues.

442. These changes to the 3 lower buttons should be done on a repair and reissue basis and on a new supply basis for Phones provided by the PHONE Company on a new install of service.

443. HEXADECIMALS AND MANURE - No this is not a joke! A pick-em up truck was outfitted with 16 numbered bushel baskets (Ø to 15). The truck with the baskets made the trip to the local dairy to pick up bulk manure from the barnyard. Each basket was filled as fast as could be and the truck was driven back to the house. On arrival, basket number 1 was emptied and then basket number 2 and so on, to basket 9 and then basket 10 was also emptied.

444. The truck was driven back to the dairy to get more manure. On arrival, the empty baskets were again filled, and the truck was again driven back to the house and as before, basket 1 was emptied and so were 2 and so on to and including basket 10. Then the truck was driven back to the dairy to do it all over again.

445. But, what about baskets Ø , 11, 12, 13, 14, and 15? They just went along for the ride, filled with perfectly good steer manure, but never

used! This is exactly what we are doing with phone numbers. We are only using the digits 1 to 10, leaving 11 to 15 and Ø just along for the ride.

446. Using HEXADECIMAL Phone numbers does make good sense especially if you have to make trips to the bulk manure dairy barnyard.

447. Mr. Neeper, what have you done in the last year, since we had our meeting, to examine, analyze, reject, or promote the use of HEXADECIMAL Phone Numbers in California?

448. POLITICAL, ADMINISTRATIVE LAW, FEDERAL AND STATE COMMISSIONS - What are we to expect from these sources? When and what will they decide? What is available in the various arsenals, and will they have the guts to live up to the reputation of the good ship DEFIANT in a furious battle? How will the PUBLIC perceive any action by any source? Did the elected officials really get the message: Its not location, location, location, but vote, vote, vote, and that is what they will NOT get unless this area code problem is addressed in full and that results in fewer disruptions and lower costs for everyone.

449. It is my opinion that the expanded use of already existing, but not as yet fully used, HEXADECIMAL PHONE NUMBERS, meets all the requirements in a superb and perfect way. No, not a reasonably close way, but in an absolutely perfect way. Magnificent is a word that comes to mind, because as science goes, often we have part of it or we have to patch around it to make it work. That is simply not the case with HEXADECIMAL NUMBERS and our PHONE system. It was, after all, built with this in mind!

450. PUBLIC Perception - The PUBLIC is mad, I dare say: "fighting mad." They are 100% correct in that the PHONE Company does make money with added area codes, and don't let them tell you any different! They are also mad, because business loose customers and have to advertise in 6 yellow pages that the PUBLIC has never received a penny in supporting revenue from day one to now. Some people, when technically briefed, become incensed over the lack of taking steps with what they call, the most obvious solution ever presented.

451. The PUBLIC doesn't like to make calls to their bookies, doctors, even

lawyers (Heaven forbid) only to receive a recording or worse still, charged for the call to never, never land that takes too much time to call the PHONE company to demand reimbursement. Do you think that is the reason for the long wait to reach a PHONE company service agent? Could be, I wont put that past them!

452. Political Savvy - The PUBLIC ultimately will show its displeasure in the voting booths of America. Our elected officials have begun to feel the heat, and this is good for this issue and my long time effort to get the use of HEXADECIMAL PHONE NUMBERS expanded to use the full set. This is the time and place for action!

453. Our California Legislature is about to take some action. Assemblyman Knox has introduced AB818. Unfortunately, his bill is based upon good intent, but bad implementation.

454. No action or bill on the national or local level will succeed without fully supporting the North American Number Plain (NANP), and AB818 does not support NANP. Of course, this HEXADECIMAL proposal you are reading, does fully support NANP!!! AB818 makes an effort to forcefully segregate some services to other area codes. The problem with this is that it still uses another DECIMAL area code! That is a fatal flaw, because we have only so many area codes. Yes, we are running out of DECIMAL area codes, but we do have 3096 HEXADECIMAL area codes, just waiting to be assigned.

455. SEGREGATING SERVICES - Segregating anything in America is risky business. This word is absurd and unacceptable. The very idea is repugnant! There is however, a good old American solution, give-em a surcharge! You got that right, a surcharge is very reasonable and you can place bets on how fast they will move to HEXADECIMAL lines that have no surcharge! And best of all, it is legal.

456. GENERAL PUBLIC - As pointed out earlier, there is a difference between the GENERAL PUBLIC and all the rest. Enlightened PUBLIC and technically experienced PUBLIC members encounter all kinds of computer things in a day's work of PHONE calling. Voice mail, three short 400 hertz beeps that are supposed to tell you to punch in the NUMBER you want someone to return a call to after receiving a tone page; but they fail to tell you that the

pay PHONE your calling from will not allow incoming calls. Following instructions from a computer synthesized voice that tells you to push 3 then do this or that and so on. Such is life in the big city and these users of Tone Pagers, Alpha Pagers, Faxes, Video Phones, and Computer Modems are all good candidates for surcharge encouraged migration motivation!

457. The wonderful thing about PUBLIC HEXADECIMAL PHONE NUMBERS is that they are available in every city and rural country; they are just everywhere, already exist, are fully integrated into the existing system, and do not use any new DECIMAL area codes and the buttons on every existing PHONE can dial them with ease. What more do you want to fix the problem?

458. WAY TO RELIEF IS PAVED AND EASILY ACCESSIBLE - Change is a disruption in the lives of everyone involved, but it is easier than you may think. This and the following example shows how easy migration to HEXADECIMAL phone numbers can be made.

459. HOLLYWOOD PAGING COMPANY - This Company uses Hollywood-6-4000 to 4999, for one thousand pager numbers and it also uses 7000 to 7999 for the same services. To get them to move from 466-4000 to say, 46*, a public HEXADECIMAL number prefix, with as little disruption as possible, the phone company can give them the entire prefix, all 65,536 HEXADECIMAL line numbers, 46*-4000 to 46*-4999 and so on. By doing this, the assignments of 4000 to 4999 and 7000 to 7999 remain intact, with only the prefix being changed. This is convenient for the paging company and keep in mind, it is less of a problem for the customers that use their services.

460. Alternatively, the 466 prefix could be kept and move the pager lines to 466-*000 to *999, and 466-#000 to #999, either of these approaches gets the pagers into the HEXADECIMAL numbering system and frees up the decimal numbers for public uses, later.

461. And keep in mind the other users of numbers, alarms, elevator phones etc. All are candidates for the private HEXADECIMAL phone numbers that exist in these same locations. Alarms and point of sale and computer modems can all use 46*-F2CD and or 46#-Ø F12 and or the existing exchange numbers, 466-C422 or 466-BCDE.

462. Best of all, the HEXADECIMAL numbers in prefix form, 46*, or in line number form as in 466-* and 466-# or in private form, they are all in existence now, and they are public or private HEXADECIMAL numbers, and are free and do not consume any digital numbers and they are in compliance with NANP.

463. The surcharge of \$5.00 per month per line on decimal numbers will motivate the change and encourage a fast response to the public need, and of course, eliminate the surcharge on these numbers, as there is no surcharge on HEXADECIMAL numbers.

464. The vacated decimal numbers will become available for public use very soon, relieving the crowding now experienced in the areas served by this prefix, and eliminating the need for new area codes now or in the future. This same example follows in every exchange in every area code in California and the nation. HEXADECIMAL numbers are available everywhere, such a free deal!

465. NORTH COUNTY AREA CODE - Then we have this example: the 760 area code put in North San Diego county. We all thought it was wholly ours, but not so. I took a survey on the street, in person, and asked if the area code was all ours; 9 out of ten responded that it was "our" area code. This fraud on the public would never have been allowed had they been informed of it. We should have gotten the entire area code as this is based on the population and the natural geography and phone service requirements of the area.

466. As it stands, either Palm Springs or North San Diego county will get yet another new area code, as time goes by, more business cards and yellow pages and other expenses, as unnecessary as can be in view of the simple alternative of using HEXADECIMAL phone numbers to relieve the decimal use consumption rate in these areas.

467. PUBLIC HEXADECIMAL NUMBER PERMUTATIONS OF * AND # - These two designated HEXADECIMAL Number symbols, * and #, will permutate in the designated sector phone numbers at all levels: area code, prefix, and line number. There is no use significance between * versus #, and they are used

here interchangeably, but do keep in mind they really are Hex B and C.

468. For example: Using this decimal number 1-213/456-7890, we can show all possible variations as 1-#13/*56-#890, 1-2*3/4#6-7*90, 1-21*/45#-78*#. As you can see, there are a lot of possibilities, some of which do not lend themselves to overwhelming public acceptance. But keep in mind the power we have here. Using either of these symbols in the area code produces 283 million new numbers, as in 21*/233-5678.

469. Putting this area code in Los Angeles, as a wide area overlay, will require users to always dial the 10-digit number. But, since the vast majority, by far, are reached by computer dialers, as a result of calling a 7 digit decimal business number, with no answer, then reaching their Public HEXADECIMAL voice mail number and leaving a message and or a toned number to return the call to, which upon call completion, the voice mail now automatically calls the Private HEXADECIMAL Pager number to leave a page. All this is done automatically, today! The use of these numbers is nearly transparent to the public, but today, no conservation of numbers is being observed.

470. In this example, Joe's Bikes number is 466-2345 a decimal number in Hollywood. A caller from Beverly Hills calls this 213 number by dialing just 466-2345, since it is local call. Since Joe is outside his store and does not hear the phone ringing, his voice mail picks up the call.

471. The voice mail Joe uses has been programmed by him, into his phone and is a Public HEXADECIMAL Number, 45*-9012, the caller is transferred and the voice mail recording is played. The caller leaves both a recorded message and also uses the provided option to leave their number for a return a call, by toning in 223-8834, and then they hang up.

472. The voice mail now recognizes that both a recorded message was left and that a toned number was left, so it communicates with the pager company using a Private HEXADECIMAL Phone number, and the number to return a call to is transmitted to Joe's pager for him to take action.

473. When Joe signed up for his voice mail and pager service, he was assigned the Public HEXADECIMAL Number, 213/45*-9012 that he is to use for

voice mail by the company (voice mail company has a block of 1000 numbers). The company programmed the pager's Private HEXADECIMAL Phone Number, 21*/782-5567 into their computer (the pager company has a 500 number block) and gave Joe the pager he is to carry. Joe DOES NOT KNOW the Private HEXADECIMAL Phone number for his pager, because he will never use it and would have no reason for knowing it, since it is transparent to his communications system.

474. In this scenario, we went from Public Decimal (7 digit Customer) to Public Decimal (7 digit Joe), to Public HEXADECIMAL (10 digit Joe's Voice Mail) to Private HEXADECIMAL (10 digit Joe's Pager). The public never new any Public or Private HEXADECIMAL Numbers were even involved, not at all!!!! The public interest is best served by keeping these computer-dialed numbers, presently decimal numbers, from being used. It is no problem at all for the computers to dial 10 digit Public or Private HEXADECIMAL numbers; we humans just don't like so darn many numbers!

475. COMPANY CURIOSITY CONFOUNDS CALLING - Did you know several big chain store operations just can't wait for their store manager to mail in the report on sales. We are having a sale on Big Macs! Raise the price of unleaded gas!

476. At some later time, possibly during the wee small hours of the morning, the computer in McDonalds Chicago Corporate office and the computer in every single McDonalds store communicate. They strike up a conversation of bits and bytes to share the day's sales information. Each can and should be using Private HEXADECIMAL Phone numbers for their phone communication. No reason exists for the use of a Public Decimal Phone number. It simply wastes numbers that the public wants and needs to be able to use. These computers have no problem dialing Private HEXADECIMAL numbers, even when they are 10 digits long, and look like this: 21E/5F3-CC3D! Its automatic, folks.

477. And this goes on for every big and even some small business. Every day and sometimes several times a day, they have a computer to computer conversation on the phone network. Multiply it out, how many thousands of lines could and should be Private HEXADECIMAL Phone Numbers? Just as a guess, I suppose there are about 30% of the decimal numbers in use today in

America that should be moved from Decimal Phone Number applications. That would free up a lot of area codes for Public Decimal uses!

478. FOREIGN COUNTRY RELATIONS - We have a very good neighbor to our North, Canada! But it is still a foreign country. Yet it uses our area codes.

479. No, don't think I don't love these wonderful people, but let there be no doubt about it, the Canadian border guard demanded that I show my \$204.31 in cash; and that was all the money I had to go to the World's Fair. It was my first realization that Canada remains a foreign country, no matter how cozy we may all be as people.

480. The complexities of this should not create an international incident, for us or them, but it is a fact that included in any consideration we may make, are the several area codes they use that we can't use. This is an issue that cannot be ignored any longer. Clearly this is a matter for federal consideration, but it does affect California in that when NANP exhausts in less than 20 years, we could suffer the lack of available area codes for use by us. Our legislature and or Public Utilities Commission needs to go on record with these concerns and demand federal action now. Even if this issue were to be debated commencing today, it would take years, 4 or 5, before effective action was commenced. Then it would take still more years to realize the benefit we seek. As I have said before, this is like a savings account, it is too late to begin it, when you really need it. So, demand action by our elected officials now, so when we really need it, the problem will have already been solved some time earlier.

481. end

482. COMPETITOR NUMBER ASSIGNMENT BLOCKS CAN BE INDIVIDUAL NUMBERS - It is another fraud on the public by the phone companies, when they tell us that competitors must have number blocks assigned in 10,000 line blocks. Furthermore, it still is fraud when they reluctantly agree to 1,000 number blocks. Why not realize, I have no intention of changing my phone number to change my PSP (phone service provider) for you or anybody. The investment in goodwill and image is too great.

483. This is the same song and dance we had with toll free numbers several years ago. Today, the phone company can and should be compelled to allow

all phone companies to offer PSP for any individual phone number anywhere, period!

484. end

485. NAY SAYERS AND OTHER SNAFUS - Expect a barrage of responses to this Proposal, but just consider the source, and you will know of the reason for the response and just how much truth is behind it. I point out this in advance to thwart their dastardly deeds.

486. Here are some tantalizing tidbits of failed philosophy. As a young boy, it was my job to mix the yellow in the gray margarine. We were all told about the ills of doing this, but they were found to be unfounded. Then we had the long delay in dialing our own long distance numbers, again a fabrication by the phone company to keep human operators in service, and profits up. More recently, we were all told of the many fires that would be occurring if we pumped our own gas. I don't remember reading about all those fires. Finally, the Phone Company was demanding that we had to use their interface to protect the network from the equipment we were connecting. This too, has gone by the wayside. And, direct connections are to be Industry standard.

487. So what will be the fate of HEXADECIMAL Phone Numbers. By Galilee, you've got it: they will try to smoke screen us with all the trumped up reasons for why it won't work, but now you know better! You can cite the alarm industry as a success story. They have been transmitting over the standard telephone network, HEXADECIMAL Digits for the last 25 years, with no problem, none, nada!

488. LOBBY MONEY - PHONE COMPANY IS SECOND IN AMOUNT AND FIRST IN LINE - With their money in hand, our officials are dare I say this, bought and sold. You can be sure lots and lots of cash will be waved in the faces of our innocent officials to frame this debate as sour grapes, and promoting the status quo as the only alternative.

489. Do you remember the guts it took for Judge Green to order the brake up of the phone company monopoly? This is the kind of leadership that it will take to solve this problem. Are you up to the challenge? Will you demand nothing less than action now? Time will tell. It's not over till the fat

bell rings.

490. End

491. DISOBEDIENCE IS PREFERRED TO SUBMISSION - Will our officials risk stepping out of line, disobeying the power of the Federal Communications Commission? If we were to advocate some out in left field action, like adding a 4th digit to the prefix or area code, which would render the entire system in cacaos, then I would not support that action.

492. This Proposal does not conflict with the NANP, it supports it fully. Compatibility is fully maintained. We just demand the expanded use of what we all paid for a long time ago: all 16 digits. Public HEXADECIMAL Phone numbers are all dialable by all phones in America, save pulse dials. Rotary dial phones can not use pagers or voice mail systems, so what is the reason for even suggesting that a problem exists with using PUBLIC HEXADECIMAL PHONE NUMBERS that use buttons already on every dial, today!

493. As far as lobbying our officials, I can report no luck. The emails, letters, and phone calls, all go unanswered or I find that I am speaking to an intern that has no idea of what I am advocating. To this day, I have yet to receive a response from the CPUC or FCC that addresses this issue by a competent author.

494. I am pleased to report the office of U. S. Congressional Representative Brian Bilbray, through his capable assistant Pat Baker, has really gone to bat on this issue. I could not have expected more from them, yet I am very disappointed with the rest of our elected officials. You must let these people know about your newfound knowledge about this issue and demand action from them, now!

495. SIGNAGE AND OTHER PUBLIC DISPLAYS - I for one, do not believe in the idea of phone companies spending the subscriber's money for signage on buildings and so on. We have the right to the lowest service costs and these expenses contribute to unnecessary costs. I have been to the executive offices of Pacific Bell in San Diego. If the general public were to see the opulence, extravagance, and spacious facilities where no cost was spared, they would be up in arms and would be mad as hell about it. This shows the lack of in-depth perception of the management of the phone

companies by the agencies charged with insuring the lowest rates possible for the services they are to provide.

496. Announcements about Public Decimal Numbers, Public HEXADECIMAL Numbers, and Private HEXADECIMAL Numbers are entirely proper and should be made and displayed at conventions and other trade shows so the attendees can learn about and participate in the benefits this Proposal brings to their particular industry.

497. SECURITY AND HEXADECIMALS - Unlike the attitudes taken by several courts in recent cases involving computer hackers that have successfully penetrated the FBI and DOD web sites on the Internet, and the similar happenings with telephone company systems, the court actions are wrong and fail to realize an extraordinary benefit staring them in their faces, namely, the use of this talent to the benefit of the public and government and business alike.

498. It is only a matter of time before very significant damage is done, let us encourage these hackers to help create blocks and programs that really do work and that will insure the public that the information and controls are safe and properly guarded. Shutting down our phone system is not adversely affected by this Proposal for enhancing the existing system by expanding the use of HEXADECIMAL Phone numbers.

499. Of course, hackers are very talented people and should be very well compensated, even while in custody, and they will participate, since they will be working from special, highly technical prisons, separately established for this very purpose, with the very best in equipment. In exchange for this extremely valuable participation and safeguard development, they will gain their freedom much sooner and be rehabilitated into society faster.

500. The public benefits will be immeasurable. If the stakes are devastatingly high, then you have to go where you find solutions, even when you don't like the situation. How embarrassing is it to acknowledge that our government and phone systems have been hacked yet another time?

501. PUBLIC SERVICE ANNOUNCEMENTS FOR HEXADECIMAL PHONE NUMBERS - The public has the right to know what we do here, and since surcharges will apply to encourage migration rather than specific orders to vacate on command certain phone numbers by selected industries, so let us inform them of these changes.

502. TONE COMBINATIONS ARE A NATIONAL SYSTEM STANDARD - The assignment of the tones that are used to represent the digits of the phone number were established long time ago and can not be changed. If it is determined that the phone company violated their very own standard, then they should be held fully accountable and pay reparations to fix the problem.

503. SCOPE OF RULE MAKING DECISION - In the final analysis, the Administrative Law Judge will make an informed decision about all this stuff. The Judge must attain sufficient technical skills applicable to this field and this issue in order to make an intelligent decision, for the future of us all is at stake. I intend to see to it that no stone is left unturned on this issue and to that end, by endlessly educating all parties of the extensive benefits of this HEXADECIMAL proposal and how perfectly all the pieces fit together to the benefit of everyone. The decisions to be made will be the most momentous and far reaching decisions, and likely, the most significant decision of our Judges career.

504. PERIPHERAL BENEFITS IN RELATION TO THIS PROPOSAL - This area code rule making is not being done in a vacuum. It includes every aspect of this issue and peripheral issues as well. This decision has far-reaching, profound effects not only in California, but the nation and the world as well. What we do here is extremely significant and will contribute immensely to how we each live our lives in communications terms, for the rest of our lives, and those of our children and so on. Lets get it right the first time, for everyone's sake!

505. The most significant issue is that with the Industry class of service, you get only a phone line with a dial tone and that's all folks. Announcing this publicly and privately and that yellow pages shall be limited to only one area code and that we should get a cut of their business revenues, even without any possibility that HEXADECIMAL Phone numbers will ever be allowed

to be advertised in these books.

506. EQUIPMENT MANUFACTURERS WILL COMPLY - As soon as the orders are issued and the phone company can demonstrate the numbers are on and operating, every manufacturer of equipment indicated they would make the changes required to their various pieces of equipment, so that they could take full advantage of the Private HEXADECIMAL Phone number group.

507. I contacted several companies: AOL will move when the system is working, ADEMCO, FBI, and DSC Security will produce "HEX READY" equipment as soon as the system is operating. Everyone I have contacted is excited about this Proposal and will cooperate on a prove it is working basis, and then they will make the equipment needed.

508. BROUHAHA, COMPLEXITIES, AND PERPLEXITY SNAFUS - We can expect an atomic explosion when the Phone Company sees how we are going to cut into their change. Switches Nortel DMS and Lucent 5ESS are all HEXADECIMAL. Why do you think this information is correct?? They lie, don't they? Based upon informed employee's comments.

509. ABSURDITY OF HAND CHANGING CUSTOMERS TO AREA CODES - Some many more years ago than I would like to remember, I wrote nearly 30 interwoven computer programs in a parts management, sales and billing package for a client.

510. After I completed the first release, the principal client demanded several additional fields be added. He wanted a second address field, parts number first digits field, credit limit field, and year to date purchases field, and so on, all to be added after the programs were done.

511. In the process of designing such a program package, it is necessary to establish precisely the format for each field, since every program reads and writes exactly in only this format. To change the format now, is a pain in the behind and should have been decided upon in the design stages. But to keep the client happy, I set out to fix the problem.

512. This is the same as the phone company spending money changing your

number identification by hand, so that your number is now in the new 760 area code and not any longer in the 619 area code. This same issue will surface when HEXADECIMAL Phone numbers, HEXADECIMAL Prefixes, and HEXIDEDECIMAL Area Codes are put into place.

513. I simply wrote a short program to read in the variables and change the part number first two digits and read out all the items with the new fields created and primed with the expected information. It took me about 4 hours to write it and test it, then 10 minutes to change all the data base using the program I had just written.

514. Someone please tell me why the phone company happily shows us how diligently they have hundreds of people working for weeks on changing your number from the old area code to the new area code. A program could do this in less than 24 hours for all 50 exchanges and require only one computer operator! Is this just a farce or what? A ploy for increasing rates? It sure is not intelligent or up to date in Kansas City!

515. HEXADECIMAL LINE DANCE - Some times the concept being discussed is elusive and defies grasp by too many people. So to get a higher level of understanding, a different approach is in order. Here is yet another description of the same Proposal.

///

516. Consider these phone numbers and details:

517. Number	Count	Description	Comment
518. 1-619/231-1310	1.	Private HEXADECIMAL	-not allowed
519. 1-619/231-1311	2.	Public Decimal	-other people's number
520. 1-619/231-1312	3.	Public Decimal	-other people's number
521. 1-619/231-1313	4.	Public Decimal	-my number
522. 1-619/231-1314	5.	Public Decimal	-other people's number
523. 1-619/231-1315	6.	Public Decimal	-other people's number
524. 1-619/231-1316	7.	Public Decimal	-other people's number

525. 1-619/231-1317	8. Public Decimal -other people's number
526. 1-619/231-1318	9. Public Decimal -other people's number
527. 1-619/231-1319	10. Public Decimal -other people's number
528. 1-619/231-1310=A	11. Public Decimal -other people's number
529. 1-619/231-131*=B	12. Public HEXADECIMAL -not allowed
530. 1-619/231-131#=C	13. Public HEXADECIMAL -not allowed
531. 1-619/231-131D	14. Private HEXADECIMAL -not allowed
532. 1-619/231-131E	15. Private HEXADECIMAL -not allowed
533. 1-619/231-131F	16. Private HEXADECIMAL -not allowed

534. NOTE: There continues to be some confusion about the use of the symbols Ø and 0. This is because the dial on your phone shows the digit after 9 to be a 0, but it is really a ten or HEXADECIMAL A. Then there is the fact that true zero is not even used, it is not on the dial, and it is represented by Ø to distinguish it from the 0, which is on the dial. Are you confused, yet?

535. Here you can see how the Public Decimal numbers amount to 10 phone lines, and the Public HEXADECIMAL numbers amount to 2 lines, but the Private HEXADECIMAL numbers amount to 4 lines, for the total of 16 lines.

536. This compares vary favorably to the previous configuration, where there are only 10 lines (62.5%), by providing 6 more lines (37.5%) in the same exchange and that are fully NANP compliant.

537. Said another way; this is a 160% improvement in utilization of this resource. And still another way, 62.5% are Public Decimal numbers, 12.5% are Public HEXADECIMAL numbers and 25% are Private HEXADECIMAL numbers. And finally, by the line numbers, for the exchange, we have to compare 10,000 with 65,536. How can you resist this temptation?

538. Now, to a graphic display of information. Here we will allow the last two digits to assume all combinations of Base 16. This will allow you to see the actual phone numbers as they lay out on the page for 1-619/231-13xy.

539. HEXADECIMAL NUMBER COMBINATIONS FOR 1-619/231-13xy

540.	Ø	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
541.	Ø	ØØ	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	ØA	ØB	ØC	ØD	ØE	ØF
542.	1	1Ø	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F
543.	2	2Ø	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F
544.	3	3Ø	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F
545.	4	4Ø	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F
546.	5	5Ø	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F
547.	6	6Ø	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F
548.	7	7Ø	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F
549.	8	8Ø	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F
550.	9	9Ø	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F
551.	A	AØ	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF
552.	B	BØ	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF
553.	C	CØ	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF
554.	D	DØ	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF
555.	E	EØ	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF
556.	F	FØ	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF

557. 1-619/231-1311 1-619/231-1300=AA

558. Within the smallest rectangle are the existing Public Decimal phone numbers. To make it easier to understand, replace the As with 0s, keeping in mind the A=0. The lowest number, 1-619/231-1311, and the highest number, 231-1300 are identified.

559. The slightly larger rectangle wraps to the right and below; this is the Public HEXADECIMAL phone number section, for pagers and voice mail and fax.

560. The remaining numbers are Private HEXADECIMAL phone numbers. Notice all these were previously wasted numbers!

561. ADOPTION AS A NATIONAL STANDARD, NANP REVISED - It would come as no surprise to find the FCC and NANP revised to incorporate all the issues presented in this Proposal, and that would be a good thing. We are on sound foundation and the plain is well thought out. Hopefully, there are no significant errors, but surly there are going to be some, no matter how hard one tries.

562. EQUIPMENT OBSOLESCENCE AND TIME TO REPLACE - There is never a program that does not involve making something obsolete in some way. Nothing in this Proposal will cause any equipment to be unusable, but some points need to be made and legislative action is called for now. Here come the Transition Police!!!

563. It shall be unlawful to sell equipment that is not HEX READY after a 1-year term is expired. This to apply to all equipment, in all fields, not just alarm equipment. All alarm equipment will still be usable, but legislative action will allow only 1 year for all new equipment to become HEX READY.

564. The alarm industry has been transmitting HEXADECIMAL code signals on the national network for the last 25 to 30 years. There are about 25 fields that entries must be made into for customizing even the most unsophisticated alarm panel. All HEXADECIMAL digits can be entered and are used, but one of the 25 fields is the phone number field, and it is handled differently, because of the 0=A problem that you all know about, now!

565. On some panels, this field is HEX READY now, as we write! On others, only some of the HEXADECIMAL digits can be entered and on still others, no HEXADECIMAL digits can be entered in this field at all.

566. This is also true for most modems used with computers, point of sale systems, credit card approval systems, and dial up ATMs. Of the equipment manufacturers I contacted, they reported that some will dial HEXADECIMAL digits, others will not or will only dial certain digits, some do not know for sure!

567. We will know the truth to all this after the test lines are set up so various industries and others can completely determine the abilities of various pieces of equipment. Once this is done, the CPUC must take action to require the phone companies to cooperate with the specific needs for these older pieces of equipment in the following ways.

568. If it is found that XYZ Modems will dial only the HEXADECIMAL digit D, then requests for line numbers that include only one or more Ds shall be

made. This is a minor requirement and can be worked around easily and at no cost. With this requirement, we see that 231-D000 to 231-D999 provides for one thousand lines that will work just fine. Remember, only one digit need be HEXADECIMAL for the entire number to be HEXADECIMAL!

569. There is always the \$5.00 surcharge option to make it work using Public Decimal line numbers. As you can see, we are very timely with this Proposal. The rewards will come in a few years, when we really demand it, and then it will be there for us to use. Smart planing don't you think!

570. The Phone Company gets to keep the \$52.00 pre paid yearly for the Industry class of service revenue, even if the service is shut off. The Phone Company may make whatever investments it wants and earn whatever income derived from those investments as its own profit. Thanks a lot!

571. WHERE WILL IT WORK AND WHY THE DELAYS - Standard lines, copper or fiber-optic networks, all will work without a problem. After all, Bell Labs designed it this way! Then this is a very good question: Why isn't the lab or someone from the phone company spearheading this very Proposal? Good question, very good question! The answer is also very simple: Follow the money.

572. Earlier I told you that the Phone Company views the adding of area codes as a small cash cow. Just think of all those wrong numbers, you will pay for, then there is the added number of yellow pages and additional listings in several area codes, and you will pay for these also.

573. WHAT LITMUS TEST SHOULD WE APPLY TO THIS PROPOSAL - If it's not broken, don't fix it. That is a wise concept, but it is broken a little bit now, and if we are to believe the professional telephone industry members, it will be broken a lot more in just a very few years.

574. Notwithstanding, the proliferation of area codes, the causal issue that brings us to this discussion, on the surface, not much is evident about these problems, but that same calm precedes a bad storm.

575. If the predictions are on the money, then in 20 years we will have a

very big problem. If a longer time, then it is still coming, what is so comforting about 3 or 5 extra years when no action was taken in time that would have prevented the problem completely. Then there is the possibility that the system will fail in say 10 or 12 years, somewhat ahead of the predicted exhaust time frame. Any of these scenarios allows the same problem to manifest in the future, whenever that occurs.

576. Here we have the opportunity to solve this problem in time and in a very reasonable way: use HEXADECIMAL Phone Numbers.

577. This will solve the problem for 100 years and maybe forever, because there are some real advances on the horizon and they will come into fruition when there is enough money involved. Oh, I forgot to mention you get to pay extra for all those advances, but HEXADECIMAL Phone numbers are free!

578. INDUSTRY ACCESS DATA IMPERATIVE TO COMPLETE ACCURATE PICTURE - All industries need to be accurately represented in terms that show just how many lines are being used and by whom. Lacking this information, we simply stumble in the dark, and no one lights a candle.

579. We are forced to make assumptions that are largely just guesses. If we say that AOL has 100,000 lines in San Diego County, and that all others combined have another 100,000 lines, all just a guess, but we see that 200,000 lines are being used for this type of dial up communication to the Internet. If all move to Private HEXADECIMAL Phone number lines, that frees up 20 Public Decimal exchanges for assignment to public uses.

580. A point of fact: Unlike the alarm discussion below, Internet access is made by modems under the control of your computer that is running a program that was written by AOL staff, for example. It is no problem for this program to be changed so that it will allow the dialing of Private HEXADECIMAL Phone numbers. See the programming example I provide elsewhere in this writing to see just how minor the changes are that will allow for this to become a reality.

581. The plain is for the phone company to make available the needed facilities in the Private HEXADECIMAL Phone number group, then, when AOL

releases their next revision program, it will include the new part that will allow the dialing of these numbers and the users will be instructed that they must change to the new numbers, since in 30 days the old numbers will no longer work! But even this can be automated. When the new program revision is run, it transfers preferences that the client has established and moves them to the new program. Included in this data, is the current dial up number that the program uses. Since AOL knows its own dial up numbers, it can simply do a substitution, automatically, without customer intervention. A sweet deal!

582. This same reasoning holds somewhat for alarm companies. We estimate they may have 10,000 lines in use in the county. If they have a growth rate of 20 lines per month, all of which could be moved to Private HEXADECIMAL, then the sooner we impose the requirements proposed, the sooner we stop depleting this coveted Public Decimal resource, with its consumption of Public Decimal phone numbers.

583. There is a problem with the older alarm panels that can dial just a selected few, or none of the Private HEXADECIMAL Phone numbers. We will be able to stem the tide of increasing use by the imposed equipment requirements, but only a very few of the old-line number users may be able to move, this is to be expected. As soon as the new equipment is in use, all will begin using the new Private HEXADECIMAL Phone numbers.

584. Since a lot of the alarm lines are toll free, and are therefor translated numbers, the idea here is to change the underlying number from Decimal to HEXADECIMAL. Such a change will work just fine and is transparent to the all in the industry. What has to be done here and every where else, is to stop the expansion of these industries into the Public Decimal Phone number group.

585. LEGAL PRACTICE IN PRO PER- I had worked all my life (Hughes Research (2 patent disclosures) & North American Rockwell (over 100 engineering specifications for NASA and Air Force) and During this time, and also while teaching at both the Long Beach and Los Angeles Campuses of California State University, Electrical Engineering (Sponsor of Micro Mouse Project, a computer controlled robot that can solve a maze), (Sponsor IEEE Chapter) I also owned a Telephone Answering Service and Burglar Alarm Company and

electronics repair and did radiotelephone services along with radio and TV engineering (I hold a valid First Class Radio Telephone License) I began teaching at University of Hawaii, Electrical Engineering Department. Soon after, the monthly payments due me stopped coming and I returned to California and began teaching again and made a proposal to Pacific Telephone about several PHONE related ideas and the use of HEXADECIMAL PHONE NUMBERS.

586. RISK ASSESSMENT AND OTHER POLITICALLY CORRECT ACTIVITIES - Even with the publication of this Treatise on HEXADECIMALS in nationally circulated media, and even recognizing that it is not over until the fat bell rings, nothing in life is a sure thing and this really does apply to the several state agencies and the riskieous one of all: the FCC!

587. The FCC is clearly at fault in every way for several reasons:

588. It should have seen this situation long ago on the horizon.

589. It should have encouraged the use of alternative solutions.

590. It should have developed and presented solutions, itself.

591. It should have heard in presentations before its proceedings. It should be recognized that any agency that can't even count the Channels, starting at 2 instead of 1 should have been an indelible sign of things to come.

592. CONTRASTING DECIMAL AND HEXADECIMAL NUMBERS - What are some of the noteworthy differences in decimal and HEXADECIMAL phone numbers? We all dial numbers on the phone, but most of us think of all of the number as being just the number. Yet, in the phone industry, these parts are given names. For example, in the number 1-619/231-1313, we have the long distance access (1) followed by the area code (619) followed by the exchange prefix (231) followed by the line number (1313).

593. Let us look at only the line number part of the whole phone number. This is better done with a specific example:

594. DECIMAL LINE NUMBER DISCUSSION for (231-1313 or 952-9901)

595. Base is 10 using (0,1,2,3,4,5,6,7,8,9), so position weight is left to right 3, 2, 1, 0 as in:

596. (Here power is shown as \ so email will work)

597. $(10 \setminus 3)$ is position 4 and it's weight is 1000

598. $(10 \setminus 2)$ is position 3 and it's weight is 100

599. $(10 \setminus 1)$ is position 2 and it's weight is 10

600. $(10 \setminus 0)$ is position 1 and it's weight is 1.

601. So, if we have full population,

602. $9 (1000) = 9000$ and

603. $9 (100) = 900$ and

604. $9 (10) = 90$ and

605. $9 (1) = 9$ and ALL this adds to 9999.

606. Some math shows us that the total number of possible phone line numbers is 0000 to 9999, or 10,000. This is the total possible number of LINE NUMBERS using a 4 digit LINE NUMBER format.

607. Several problems. First the phone number does not start at 0, because that is a TRUE 10, or hex A. TRUE Ø is not currently used and

608. The # on your phone is a 12, or hex C and

609. the * on your phone is a 11, or hex B and

610. the 0 on your phone is a 10, or hex A.

611. And I bet you thought this was easy!

612. HEX-A-DECIMAL LINE NUMBER DISCUSSION for (2F4-BC92, or 9FF-7DEF)

613. Base is 16 using (0,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F) so position weight is left to right 3, 2, 1, 0

614. as in:

615. (16^3) is position 4 and it's weight is 4096

616. (16^2) is position 3 and it's weight is 256

617. (16^1) is position 2 and it's weight is 16

618. (16^0) is position 1 and it's weight is 1.

619. So, if we have full population,

620. $15 (4096) = 61440$ and

621. $15 (256) = 3840$ and

622. $15 (16) = 240$ and

623. $15 (1) = 15$ and ALL this adds to 65535.

624. Some math shows us that the total number of possible phone line numbers is 0000 to FFFF, 65536. This is the total possible number of LINE NUMBERS using a 4 digit LINE NUMBER format.

625. Comparative analysis reveals that for a 4 digit line number, comparing decimal (modified by industry) with HEXADECIMAL we find a major availability of numbers. On the order of $65536 - 10000 = 55536$, or FIFTY FIVE THOUSAND NEW, FREE, ALREADY PAID FOR PHONE NUMBERS THAT ALREADY WORK PROPERLY WITH THE EXISTING PHONE NETWORK.

626. Nothing is said about using HEXADECIMAL numbers in the exchange prefix

or the area codes.

627. NOTE: Telephone persons have contributed to the information provided but must remain anonymous to protect their jobs. Some major number differences are argued, based upon the information given by these same phone company employees, in the form of we can't do that, or that will not work because of this, and so on. Presented here is the best information I have been able to gather,

628. and it does have some flaws, and decisions will be made about it, but on the whole, this is good reliable information.

629. TO BE OR NOT TO BE - That is a question with many answers. To be honest, even down right specific about it, will not win friends in high places, but to be less than that, is to be dishonest, something I have not developed an interest in doing in my life.

630. Then there is the politically correct issue of innuendo and casual forgot escape routes, which I detest. So which path to take, what will be the ramifications of each, and can I expect to be included in the impending explosion? As an Officer of the Court, attorneys are under oath to present the truth, am I to be held to a lesser standard?

631. All of these people, and especially the elected and appointed ones, have a fiduciary obligation to act on these issues and to be prepared to suffer exposure for failing to act. After 15 years and most recently, after a whole year, with face to face meetings, still no action, it is easy to see that they just don't care; they have no fear!

632. There, you have it! Like it or not, exposure will be the order of the day. We will let the chips fall where they may. After all, I did not forget or fail, they did, so let them stew in what is of there own making.

633. On the state level, the bill AB818 Area Codes was introduced by Knox. He did not have good advice and on contact with his office, I was directed to an assistant with no knowledge of the subject. After several calls, and emails, and information, she wrote me, 'nothing to worry about, nothing will happen until November.' The bill was passed in the very next week without any expert input on the subject.

634. During this time, all members of the committee were also contacted, but not one; not even one replied or provided any person with technical skills to discuss this area code issue.

635. Now, AB818 is in the California Senate. I have contacted the leadership on 3 occasions, but nobody is there, nobody is replying. What kind of government have we allowed ourselves to have? You voted for them, so suffer!

636. Then there is the CPUC. In 1984 I wrote them and again in 1988 and again in 1995 and again in 1998. By accident, I found out that a face to face meeting could be had to introduce the HEXADECIMAL concept in person. The President of LaJolla Business Association and I went to this meeting, presented the facts and nothing has come of all that effort in the year since we met. It is astonishing to me to find nobody at home, anywhere. Is it any wonder why we have outrageous rates?

637. Then there is the lack of help on the national basis. Our two Senators don't return calls, don't reply to emails and even when called, the California State supervisor does not return calls.

638. The FCC has been written at least 10 times, I have saved the only three replies. After 3 pages of BS, the final line said: "Hex is interesting." Each commissioner was written to twice, but no answer after a year.

639. License plates use digits and letters, parking meter ticket numbers use both digits and letters, and so do airline tickets, so why not the phone network? Cell phones do not allow collect or bill to calls now so what is the beef? What is so difficult about using both digits and symbols and or letters? In a few years, with the corrections proposed to the phone pad to show the '0' as '0/A' and '*' as '*/B' and '#' as '#/C' the problem will be a short lived memory.

640. Here we have the classic situation of 13 people and a 12-person lifeboat. Something's got give in this critical issue. Hex is good!

641. Readers and especially our ALJ are reminded that frequently it is the underlying issues that power non-compliance, obstance, and greed. As the various underlying issues are mentioned, please keep in mind, many of the specifics mentioned go to the portrayal of character of the phone companies, and they are used to show the outrageous profits we are all allowed to be forced to pay.

642. This proceeding is a legal arena of the administrative law of California, it has the power of the Superior Court and with this in mind, I argue in advance, the people have the right to be informed as to all the reasons that legitimately form a part, even a remote part of the so called Area Code issue.

643. This author holds this administrative law proceeding in the highest regard, and to the extent any issue contained in this Proposal is concluded to be 'out in left field' please accept my advance apologies.

644. STAMPEDE TO MOVE OR RELUCTANCE OR JUST WHEN CONVENIENT - Advances in fire protection through use of better materials that will not allow the fire to spread as easily have been made and announced several times in the past. This advancement has not caused mass hysteria in the couch industry or public community. Still, today we see some of these materials being used and sold to the public in a variety of furniture.

645. So why would we expect to see the various industries we target as big users of Decimal numbers that could be encouraged to move to Public HEXADECIMAL or Private HEXADECIMAL numbers make a mass movement to free up the numbers we want for use by the public? We can make laws that require the NEW equipment be HEX READY in the next year. We can impose a surcharge on numbers these industries use. We do NOT say they must discard all existing equipment, but several remedies do exist including some features will not work unless movement to these new numbers is done.

646. Don't even think of trying to pry existing number customer to use a different provider with some other number- it will never happen even if the rate is much lower. No chance that I will give up my number in order to move to a different carrier - never so the whole idea of competition is a joke!

647. As a professional courtesy, I reminded Mr. Neeper to use this opportunity to reply so the public will know just what you did after being informed of the possible solution. When the opportunity came about, and after thinking a little, he could come up with only a casual comment that a letter was written to inform me that it was a FCC matter.

648. Apparently no other steps were taken in all this time, years on end and even after a face to face meeting, no reasonable effort was undertaken to resolve these issues. For example, if there are any degreed computer and communications engineers on staff or available as professional consultants, a technical report could have been ordered to independently examine the issues I raised. This was not done.

649. The Commission could have gone on record with a discussion and a resolution in favor of taking action. This was not done.

650. This is like going to a Doctor for the treatment of an illness and having to suggest a remedy on your own - where is the initiative of the doctor. He has a responsibility to propose and examine and decide on a remedy.

651. Is the FCC/CPUC technically challenged? Where is the FCC/CPUC EEs with extensive experience? This agency makes legal decisions without professional advice, this is ludicrous!!!

652. COMMENTARY AND ANALYSIS - Why are we here? Shortages of PUBLIC DECIMAL NUMBERS, not shortages of PUBLIC HEXADECIMAL NUMBERS or PRIVATE HEXADECIMAL NUMBERS. Can we develop a way to increase PUBLIC DECIMAL NUMBERS and remain compliant with NANP; a resounding yes is in order!

653. I must again remind readers that there are two situations, which deserve discussion. Of those numbers that exist in small businesses, the number on which the toll free 800 is dumped upon is an advertised and routinely used business number. I do not expect that this usage would result in the number being changed to a PRIVATE HEXADECIMAL number for obvious reasons. However, if the user does require separate lines to handle the toll free traffic, then these lines should indeed be PRIVATE

HEXADECIMAL not PUBLIC DECIMAL. The dumped on lines are not normally known to the user and are not listed.

654. In cases like alarm monitoring, the local number is not for public use, but rather it is for computer access and several toll free lines may be dumped upon these lines without a problem. They should all be PRIVATE HEXADECIMAL never PUBLIC DECIMAL as they are now.

655. Cost of surcharge versus bonus on vacating, 1 year of free service. Let the Phone Company pay. I told them nearly 15 years ago; this is their obligation

656. This situation is the direct result of greedy people and uninterested people asleep at their posts. Had my requests been acted upon, even investigated at any time during the last 15 years, absolutely no problem would exist today.

657. Both the CPUC (I did not submit to any other state) and the FCC are at fault, as well as all phone companies. There is plenty of blame to go around.

658. The Devil hides in the details, so lets turn up the heat and smoke out some details from these issues.

659. It is entirely proper to include every aspect of past, present, and future issues that did or will affect what we do here. Past letters, present letters, all determine the future; what will it hold?

660. WHAT STANDARD IS APPLICABLE - It is best to use that which we know best. I have owned and operated an alarm company since 1967. I know this industry very well and over the years I have consulted for three major security-manufacturing companies.

661. As a central station owner and installing company owner, both employees and owners alike, have a very different view of failures than do those who claim to be politically correct.

662. We have to locate the source of every failure; every one is a threat to the existence of every company. We must investigate, determine the true facts, assign blame and invoke immediate corrective action. After all robberies, fires, and heart attacks are all life threatening to our clientele.

663. Having said that, If you think I am going to ignore the failures of a whole bunch who are obligated to deal with these area code issues, you would be very wrong!

664. Starting about 15 years ago, where were the FCC and CPUC? Had they acted as I proposed or even had they examined the issues I raised, we would all be at the beach enjoying the summer, and none of us would be put through this area code mess. But they did not even after I sent them 10 letters, I sent GTE and PT 4 letters and called them repeatedly, but no one responded. More recently, I sent emails to all major phone companies and to all FCC commissioners, none, not one responded!

665. I appealed to my federal elected officials, Boxer and Feinstein, they did nothing, can't even get a reply from them either. They say they are not set up to reply to email questions or concerns, so I called the state director, personally and even he did not return my call.

666. And finally on the state level we have the very same thing. I sent and called and was actually told the Senator Peace office director would arrest me if I called any more. They never have returned a single call. Or replied to a single fax or letter.

667. Clearly there is more than enough blame to go around and these people should be held fully accountable for their lack of concern even after being heralded to action, they still did nothing! Don't allow them to escape the jaws of public opinion. Demand public explanations and public display of scrutiny as this clearly is not deserving of our votes and I personally am ashamed of the lack of action on their part.

668. I can report that out of it all, there is one star shining brightly. It is the actions of U. S Congressional Representative Brian Bilbray, whose office has been very cooperative and deserves more than honorable

mention. I have had special success with the staff of this office.

669. COMMENTARY AND ANALYSIS - Why are we here? Shortages of PUBLIC DECIMAL phone numbers, NOT shortages of PUBLIC HEXADECIMAL phone numbers or PRIVATE HEXADECIMAL phone numbers. Can we devise a way to increase the PUBLIC DECIMAL phone numbers, YES! And still comply with NANP, a resounding YES, YES!

670. DOES THE PUBLIC HAVE UNLIMITED RIGHT TO PARTICIPATE - All things considered, the answer is yes. In truth, participation is severely limited, even more when they tell you otherwise.

671. Consider CPUC hearings. After all the trouble getting there and having a court reporter make an official record, nothing happens - it is a black hole. A lie on its face! After all, out of 2 million people only 5 persons showed up - nobody got the message! A failure from all points of view.

672. DEALING WITH CAUSE AND EFFECT - Failure is the cause and the effect is assembly bill AB818. I will not kowtow to the politically correct because to be politically correct is to be intellectually dishonest; an oxymoron if you will!

673. Water runs down hill - If you want to drain the PUBLIC DECIMAL phone number contamination represented by alarms, point of sale, pagers etc. then make low prices and the water will flow down hill to them. To make it flow faster, impose a surcharge on all PUBLIC DECIMAL phone numbers that are not used for voice as the primary purpose of the line.

674. Decade counters count in base 16, HEXADECIMAL, so it is necessary to create premature signals to cause the counter to limit itself to base 10, decimal. So, we already have the system in the HEXADECIMAL mode, but deliberately defeat its use with these extra "wired in straps" the removal or cutting of which, will allow the system to be all it can be, namely HEXADECIMAL. Actually removing or cutting the wires on the line card circuit boards will make them into HEXADECIMAL cards since this is the basis upon which they work already!

675. Even more graphically, most wallboard and other construction materials

come in 4' x 8' sheets. For a moment imagine double the size, 8' x 16' and then notice we have 10' ceilings. All this material has to be cut to 10' from the 16' length that it comes in from the supplier. So we waste the 6-foot part of each piece of material. This is exactly what we do when we only use the 10 digits out of the 16 digits available for phone numbers.

676. I did not take the pen in hand to address some narrow technical issue, but rather to push the envelope of this area code issue to the farthest depth and breadth possible. This includes historic aspects, current dilemma, and future advantages.

677. Several more hours are necessary to make this writing meet my standard of professional expectation, but realizing that there is only a chance of getting paid for my time and that it is nearly non existent, or slim to none at best. So, I have gotten this writing into the 90s as they say, and that will just have to do for now.

678. How can we have faith in or expect that the FCC can resolve this issue when they can't even manage the pay phones, or cellular phones, or channel 1 on the TV, which leaves us to believe that this organization is, for the most part, clue less as to needs and solutions. It may be true that they have handled hundreds of other issues quite well, but unfortunately what we have here is the same issue facing the train engineer. For the last several years, he has piloted the train, safely and without incident, but today he has an accident and all hell brakes loose. This is as it should be; this is the standard we all should hold our public servants to in both the long and short run.

679. Where were your profilers and predictors of future needs and trends 20 and 10 years, even 5 years ago? This situation should have been fully expected and action taken well in advance of the mess we now find ourselves in, and over our heads to boot!

680. FORMAL APOLOGIES DUE THE AMERICAN PEOPLE AND ME - Outrageous lack of pro-action by the very agencies we all trusted to worry about these things grossly failed to do their jobs. Save those who will resign, they all owe us formal apologies for outrageously poor conduct, very unprofessional, indeed!

681. Had this been done in a military setting, courts martial action would have been the order of the day.

682. EVERY INTERVENOR SHOULD BE OFFENDED - It is outrageous to require persons of the general public and persons with quality technical skills both grouped with official parties to an action properly before the FCC / CPUC.

683. This is ludicrous, dumb, and wholly without merit and should be changed immediately. The procedure should be that the PUBLIC ADVOCATE is the person with party status not the person with an idea or concept and it should be through the Public Advocate's office that ALL publishing is done and fully paid for by the FCC / CPUC. Placing such a burden on me is unreasonable and just plain wrong.

684. EQUIPMENT LEGISLATION REQUIREMENTS - California Legislature must enact legislation that requires all electronic dialers to be HEX READY by 1/1/2000, or ASAP. No electronic dialer shall be sold in the state of California that is NOT hex ready after this date.

685. All Hex Ready electronic dialers shall be able to store no less than 64 bytes of dialable digits including all DTMF / Touch-Tone / HEXADECIMAL Digits from memory and also store needed dialing control codes.

686. Two examples: A number of this type: (Note the - / are for easy reading)

687. 95,, *70 ,, 10 10 288,,1 80F/23E-217D,,:7312750:223-0912 %

688. this counts out to 48 possible digits, or for this NEW TYPE code:

689. 9521,,1-101/101-*700,,1-101/101-0288,,1-80F/23E-

690. 217D,,:7312750:223-0912 %

691. Which counts to 64 bytes, where

692. 04 digits - 9522 are for an outside line,

693. 01 digit - comma is 2 second time delay,

694. 11 digits - 1-101/101-*700 turns off call waiting, (10 digits long),

695. 11 digits - 1-101/101-0288 carrier switch, (10 digits long),

696. 11 digits - the toll free number 1-80F/23E-217C,

697. 01 digit - the colon, wait for command to complete restricted access,

698. 07 digits - restricted access to the number, password,
699. 07 digits - calling equipment's identification code,
700. 01 digit - ends the input with %.

701. At this point, the connection has been established, the caller identified and the transmission of whatever information may safely begin.

702. WITH REGARD TO THE NEW TYPE NUMBERS - Some passing notes about *70 and *71, *72, and *693 and so on. Now, these will not waste the entire prefix, *70-xxxx amounting to 65536 numbers wasted as in *70-FFFF because of the requirement to dial 1-101/101-*700 first. By dialing the 101 prefix followed by the control you want to initiate, *70x in this case, the x is ignored, but in the case of *73 it is *734 to command forwarding on the 4th ring, for example. This groups all control codes into one exchange of one area code, so everyone uses only one prefix, the 101-xxxx prefix for 1010288= 101-0288 and 101*7000= 101-*70?

703. HOW TO TELL WHEN TO DIAL THE AREA CODES - Today we have overlays. How does the person, who just picked up a business card, call the number on the card listed for voice, pager, or fax? Does he dial the area code or not? Since he is smart enough to know that he is "in the valley," he knows the call should be local, so no area code should be dialed, WRONG! That is an overlay number, the area code must always be dialed!

704. Had the number been for a pager or fax, the number would have a * or # imbedded somewhere in the number. That is INDICATION that the full number must ALWAYS be dialed. The number, 1-213/#56-1234, users know at a glance that this number must always be dialed in full, with the area code. A hidden advantage to PUBLIC HEXADECIMAL Phone numbers!

705. TABLE OF THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages (where four 256 pages equal 1k) as follows:

706. Each of the Tables presented in this section is shown to aid you in visualizing the vast wasteland that exists when we limit our numbering system to just base ten. There are some public limitations involved in expanding to HEXADECIMAL Numbers, but they are easily overcome and put

completely to rest with the realization that no change is proposed or being made by the Neill Plain to any Public Decimal phone number. What we are doing is using "the rest of the numbers," a very reasonable action and one that is long over due.

707. Since we are discussing a three-digit code, this discussion is equally valid for Area Codes and for Prefixes, because both are three digits. Just apply a little bit of common sense to these tables and you will be able to learn from the experience.

708. It is imperative that you remember the introduction of PUBLIC DECIMAL numbers, this term applies to all the phone numbers in use today. Then there are the PUBLIC HEXADECIMAL numbers which involve the use of the * and # in the number. These buttons are already on your phone and should not cause any confusion, and if the requests made in this document are implemented, then the button's designation will be changed to reflect their true function as B=* and C=#. There is no doubt that this will take some time, but we have to start somewhere. And finally we have PRIVATE HEXADECIMAL numbers to be used by Industry. These numbers are NOT intended to be dialed by the public, you will not be getting a new phone or ever have a need to dial any of these numbers. Then why are they so very important? It is a matter of move the industries away from the Public Decimal numbers so the General Public can use them. This freeing up of numbers is key to this plain.

709. Consistent with the above reminder is the need to again point out that the public comes in three classifications that must be clearly understood. The term GENERAL PUBLIC refers to the bulk of the population and no change is contemplated by this proposal in the ways these people use their phones or the numbers they dial. ENLIGHTENED PUBLIC is a term used to represent those people with more skills than the average person. We recognize that only a small number of business people use pagers and faxes directly and routinely every day. These people have no problem with different phone numbers, because they are enlightened in the world of new gadgets and will have no problem with 10-digit dialing. Realize that although many people do have pagers, they are secondary pagers, a part of an overall voice mail

system. When the caller leaves a voice mail message or the recorded message requests that a number be dialed in, then after the caller hangs up, the computer dials these pager numbers, the bulk of pager numbers are not dialed by people! TECHNICAL PUBLIC is a term for the technicians that program and install various systems every day and to them, the concept of HEXADECIMALs is elementary to say the most about it. Their electronic dialers can and will dial 10+ numbers with ease and with 100% accuracy as well.

710. On each page, I have attempted to relate the many possible uses, and note some of the more famous numbers.

///

711. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:

712. This is the "0 " page for 3 digit codes used for Area Codes and Prefixes.

000	001	002	003	004	005	006	007	008	009	00A=0	00B=*	00C=#	00D	00E	00F
010	011	012	013	014	015	016	017	018	019	01A=0	01B=*	01C=#	01D	01E	01F
020	021	022	023	024	025	026	027	028	029	02A=0	02B=*	02C=#	02D	02E	02F
030	031	032	033	034	035	036	037	038	039	03A=0	03B=*	03C=#	03D	03E	03F
040	041	042	043	044	045	046	047	048	049	04A=0	04B=*	04C=#	04D	04E	04F
050	051	052	053	054	055	056	057	058	059	05A=0	05B=*	05C=#	05D	05E	05F
060	061	062	063	064	065	066	067	068	069	06A=0	06B=*	06C=#	06D	06E	06F
070	071	072	073	074	075	076	077	078	079	07A=0	07B=*	07C=#	07D	07E	07F
080	081	082	083	084	085	086	087	088	089	08A=0	08B=*	08C=#	08D	08E	08F
090	091	092	093	094	095	096	097	098	099	09A=0	09B=*	09C=#	09D	09E	09F
0A0	0A1	0A2	0A3	0A4	0A5	0A6	0A7	0A8	0A9	0AA=0	0AB=*	0AC=#	0AD	0AE	0AF
0B0	0B1	0B2	0B3	0B4	0B5	0B6	0B7	0B8	0B9	0BA=0	0BB=*	0BC=#	0BD	0BE	0BF
0C0	0C1	0C2	0C3	0C4	0C5	0C6	0C7	0C8	0C9	0CA=0	0CB=*	0CC=#	0CD	0CE	0CF
0D0	0D1	0D2	0D3	0D4	0D5	0D6	0D7	0D8	0D9	0DA=0	0DB=*	0DC=#	0DD	0DE	0DF
0E0	0E1	0E2	0E3	0E4	0E5	0E6	0E7	0E8	0E9	0EA=0	0EB=*	0EC=#	0ED	0EE	0EF
0F0	0F1	0F2	0F3	0F4	0F5	0F6	0F7	0F8	0F9	0FA=0	0FB=*	0FC=#	0FD	0FE	0FF

713. This is a PRIVATE HEXADECIMAL code page particularly well suited for the TECHNICAL PUBLIC as in alarms, point of sale applications, etceteras, but do avoid applications of public programming, as in computer dial up

modems, because public WILL CONFUSE 0 and Ø leading to the wrong numbers. Ø = true zero, DO NOT CONFUSE WITH A = 0 ON DIAL

714. Blocks are as in 100 block, (3 digits) base10, equals 1000 and

715. Pages are as in 256 page, (3-digit) base16, and equals 4096.

716. For a total HEXADECIMAL system, AREA CODE, PREFIX, AND LINE NUMBER. We have $4096 \times 65536 = 268,435,456$ lines for each area code as compared to 10,000,000 in a decimal only system. So each number you see on the page represents 268 million lines. The whole system is $4096 \times 268,435,456 = 1.0995116E12$ or 1,099,511,600,000 or about 1100 billion numbers, and California alone has 10 billion. We can even supply Mars with numbers!

717. Notes: Examples are good for both area code and prefix applications

718. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

719. PUBLIC HEXADECIMAL -- NONE

720. PRIVATE HEXADECIMAL - 1-ØE3/Ø88-ØØ21

721. ØF9-123Ø

722. Famous residents on this page include:

723. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

724. This is the "1" page for 3 digit codes used for Area Codes and Prefixes.

100	101	102	103	104	105	106	107	108	109	10A=0	10B=*	10C=#	10D	10E	10F
110	111	112	113	114	115	116	117	118	119	11A=0	11B=*	11C=#	11D	11E	11F
120	121	122	123	124	125	126	127	128	129	12A=0	12B=*	12C=#	12D	12E	12F
130	131	132	133	134	135	136	137	138	139	13A=0	13B=*	13C=#	13D	13E	13F
140	141	142	143	144	145	146	147	148	149	14A=0	14B=*	14C=#	14D	14E	14F
150	151	152	153	154	155	156	157	158	159	15A=0	15B=*	15C=#	15D	15E	15F
160	161	162	163	164	165	166	167	168	169	16A=0	16B=*	16C=#	16D	16E	16F
170	171	172	173	174	175	176	177	178	179	17A=0	17B=*	17C=#	17D	17E	17F
180	181	182	183	184	185	186	187	188	189	18A=0	18B=*	18C=#	18D	18E	18F
190	191	192	193	194	195	196	197	198	199	19A=0	19B=*	19C=#	19D	19E	19F
1A0	1A1	1A2	1A3	1A4	1A5	1A6	1A7	1A8	1A9	1AA=0	1AB=*	1AC=#	1AD	1AE	1AF
1B0	1B1	1B2	1B3	1B4	1B5	1B6	1B7	1B8	1B9	1BA=0	1BB=*	1BC=#	1BD	1BE	1BF
1C0	1C1	1C2	1C3	1C4	1C5	1C6	1C7	1C8	1C9	1CA=0	1CB=*	1CC=#	1CD	1CE	1CF
1D0	1D1	1D2	1D3	1D4	1D5	1D6	1D7	1D8	1D9	1DA=0	1DB=*	1DC=#	1DD	1DE	1DF
1E0	1E1	1E2	1E3	1E4	1E5	1E6	1E7	1E8	1E9	1EA=0	1EB=*	1EC=#	1ED	1EE	1EF
1F0	1F1	1F2	1F3	1F4	1F5	1F6	1F7	1F8	1F9	1FA=0	1FB=*	1FC=#	1FD	1FE	1FF

725. This is a PUBLIC DECIMAL code page particularly well suited for special GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

726. The term SPECIAL is used to denote acknowledgment of the dial 1 problem, that can be overcome by allowing the dialing of the area code for calls from within the area code. An option that activates this whole page.

727. Notes: Examples are good for both area code and prefix applications

728. PUBLIC DECIMAL ----- 1-199 /100-1234 where A=0, B=*, AND C=#

729. PUBLIC HEXADECIMAL -- 1-17C=#/149-B=*123

730. PRIVATE HEXADECIMAL - 1-1F0 /1F7-EFDE

731. Famous residents on this page include:

732. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

733. This is the "2" page for 3 digit codes used for Area Codes and Prefixes.

200	201	202	203	204	205	206	207	208	209	20A=0	20B=*	20C=#	20D	20E	20F
210	211	212	213	214	215	216	217	218	219	21A=0	21B=*	21C=#	21D	21E	21F
220	221	222	223	224	225	226	227	228	229	22A=0	22B=*	22C=#	22D	22E	22F
230	231	232	233	234	235	236	237	238	239	23A=0	23B=*	23C=#	23D	23E	23F
240	241	242	243	244	245	246	247	248	249	24A=0	24B=*	24C=#	24D	24E	24F
250	251	252	253	254	255	256	257	258	259	25A=0	25B=*	25C=#	25D	25E	25F
260	261	262	263	264	265	266	267	268	269	26A=0	26B=*	26C=#	26D	26E	26F
270	271	272	273	274	275	276	277	278	279	27A=0	27B=*	27C=#	27D	27E	27F
280	281	282	283	284	285	286	287	288	289	28A=0	28B=*	28C=#	28D	28E	28F
290	291	292	293	294	295	296	297	298	299	29A=0	29B=*	29C=#	29D	29E	29F
2A0	2A1	2A2	2A3	2A4	2A5	2A6	2A7	2A8	2A9	2AA=0	2AB=*	2AC=#	2AD	2AE	2AF
2B0	2B1	2B2	2B3	2B4	2B5	2B6	2B7	2B8	2B9	2BA=0	2BB=*	2BC=#	2BD	2BE	2BF
2C0	2C1	2C2	2C3	2C4	2C5	2C6	2C7	2C8	2C9	2CA=0	2CB=*	2CC=#	2CD	2CE	2CF
2D0	2D1	2D2	2D3	2D4	2D5	2D6	2D7	2D8	2D9	2DA=0	2DB=*	2DC=#	2DD	2DE	2DF
2E0	2E1	2E2	2E3	2E4	2E5	2E6	2E7	2E8	2E9	2EA=0	2EB=*	2EC=#	2ED	2EE	2EF
2F0	2F1	2F2	2F3	2F4	2F5	2F6	2F7	2F8	2F9	2FA=0	2FB=*	2FC=#	2FD	2FE	2FF

734. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

735. Notes: Examples are good for both area code and prefix applications

736. PUBLIC DECIMAL ----- 1-221 /265 -2991

737. PUBLIC HEXADECIMAL -- 1-29B=*/21A=0-2C=#54 where 0=A, B=*, C=#

738. PRIVATE HEXADECIMAL - 1-2F4 /26D -2E19

739. Famous residents on this page include:

740. Interesting number combinations on this page include:

741. 1-234/*777-PAGE

742. This is a pager because of the * and

743. is three of a kind and

744. a vanity number choice word "PAGE."

745. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

746. This is the "3" page for 3 digit codes used for Area Codes and Prefixes.

300	301	302	303	304	305	306	307	308	309	30A=0	30B=* 30C=#	30D	30E	30F
310	311	312	313	314	315	316	317	318	319	31A=0	31B=* 31C=#	31D	31E	31F
320	321	322	323	324	325	326	327	328	329	32A=0	32B=* 32C=#	32D	32E	32F
330	331	332	333	334	335	336	337	338	339	33A=0	33B=* 33C=#	33D	33E	33F
340	341	342	343	344	345	346	347	348	349	34A=0	34B=* 34C=#	34D	34E	34F
350	351	352	353	354	355	356	357	358	359	35A=0	35B=* 35C=#	35D	35E	35F
360	361	362	363	364	365	366	367	368	369	36A=0	36B=* 36C=#	36D	36E	36F
370	371	372	373	374	375	376	377	378	379	37A=0	37B=* 37C=#	37D	37E	37F
380	381	382	383	384	385	386	387	388	389	38A=0	38B=* 38C=#	38D	38E	38F
390	391	392	393	394	395	396	397	398	399	39A=0	39B=* 39C=#	39D	39E	39F
3A0	3A1	3A2	3A3	3A4	3A5	3A6	3A7	3A8	3A9	3AA=0	3AB=* 3AC=#	3AD	3AE	3AF
3B0	3B1	3B2	3B3	3B4	3B5	3B6	3B7	3B8	3B9	3BA=0	3BB=* 3BC=#	3BD	3BE	3BF
3C0	3C1	3C2	3C3	3C4	3C5	3C6	3C7	3C8	3C9	3CA=0	3CB=* 3CC=#	3CD	3CE	3CF
3D0	3D1	3D2	3D3	3D4	3D5	3D6	3D7	3D8	3D9	3DA=0	3DB=* 3DC=#	3DD	3DE	3DF
3E0	3E1	3E2	3E3	3E4	3E5	3E6	3E7	3E8	3E9	3EA=0	3EB=* 3EC=#	3ED	3EE	3EF
3F0	3F1	3F2	3F3	3F4	3F5	3F6	3F7	3F8	3F9	3FA=0	3FB=* 3FC=#	3FD	3FE	3FF

747. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

748. Notes: Examples are good for both area code and prefix applications

749. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

750. PUBLIC HEXADECIMAL -- NONE

751. PRIVATE HEXADECIMAL - 1-EF0/EF7-EFDE

752. Famous residents on this page include:

753. 311 Not emergency police number

754. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

755. This is the "4" page for 3 digit codes used for Area Codes and Prefixes.

400	401	402	403	404	405	406	407	408	409	40A=0	40B=*	40C=#	40D	40E	40F
410	411	412	413	414	415	416	417	418	419	41A=0	41B=*	41C=#	41D	41E	41F
420	421	422	423	424	425	426	427	428	429	42A=0	42B=*	42C=#	42D	42E	42F
430	431	432	433	434	435	436	437	438	439	43A=0	43B=*	43C=#	43D	43E	43F
440	441	442	443	444	445	446	447	448	449	44A=0	44B=*	44C=#	44D	44E	44F
450	451	452	453	454	455	456	457	458	459	45A=0	45B=*	45C=#	45D	45E	45F
460	461	462	463	464	465	466	467	468	469	46A=0	46B=*	46C=#	46D	46E	46F
470	471	472	473	474	475	476	477	478	479	47A=0	47B=*	47C=#	47D	47E	47F
480	481	482	483	484	485	486	487	488	489	48A=0	48B=*	48C=#	48D	48E	48F
490	491	492	493	494	495	496	497	498	499	49A=0	49B=*	49C=#	49D	49E	49F
4A0	4A1	4A2	4A3	4A4	4A5	4A6	4A7	4A8	4A9	4AA=0	4AB=*	4AC=#	4AD	4AE	4AF
4B0	4B1	4B2	4B3	4B4	4B5	4B6	4B7	4B8	4B9	4BA=0	4BB=*	4BC=#	4BD	4BE	4BF
4C0	4C1	4C2	4C3	4C4	4C5	4C6	4C7	4C8	4C9	4CA=0	4CB=*	4CC=#	4CD	4CE	4CF
4D0	4D1	4D2	4D3	4D4	4D5	4D6	4D7	4D8	4D9	4DA=0	4DB=*	4DC=#	4DD	4DE	4DF
4E0	4E1	4E2	4E3	4E4	4E5	4E6	4E7	4E8	4E9	4EA=0	4EB=*	4EC=#	4ED	4EE	4EF
4F0	4F1	4F2	4F3	4F4	4F5	4F6	4F7	4F8	4F9	4FA=0	4FB=*	4FC=#	4FD	4FE	4FF

756. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

757. Notes: Examples are good for both area code and prefix applications

758. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

759. PUBLIC HEXADECIMAL -- NONE

760. PRIVATE HEXADECIMAL - 1-EF0 /EF7-EFDE

761. Famous residents on this page include:

762. 411 Directory Assistance

775. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

777. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

779. PRIVATE HEXADECIMAL - 1-EF0/EF7-EFDE

781. 611 Repair Service

783. This is the "7" page for 3 digit codes used for Area Codes and Prefixes.

Prof Bill Neill's Comments & Proposal on Hexadecimal Phone Numbers 7/27/99 Page 105

7A0	7A1	7A2	7A3	7A4	7A5	7A6	7A7	7A8	7A9	7AA=0	7AB=*	7AC=#	7AD	7AE	7AF
7B0	7B1	7B2	7B3	7B4	7B5	7B6	7B7	7B8	7B9	7BA=0	7BB=*	7BC=#	7BD	7BE	7BF
7C0	7C1	7C2	7C3	7C4	7C5	7C6	7C7	7C8	7C9	7CA=0	7CB=*	7CC=#	7CD	7CE	7CF
7D0	7D1	7D2	7D3	7D4	7D5	7D6	7D7	7D8	7D9	7DA=0	7DB=*	7DC=#	7DD	7DE	7DF
7E0	7E1	7E2	7E3	7E4	7E5	7E6	7E7	7E8	7E9	7EA=0	7EB=*	7EC=#	7ED	7EE	7EF
7F0	7F1	7F2	7F3	7F4	7F5	7F6	7F7	7F8	7F9	7FA=0	7FB=*	7FC=#	7FD	7FE	7FF

784. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

785. Notes: Examples are good for both area code and prefix applications

786. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

787. PUBLIC HEXADECIMAL -- NONE

788. PRIVATE HEXADECIMAL - 1-EF0/EF7-EFDE

789. Famous residents on this page include:

790. 1-700/xxx-yyyy line carrier test

791. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

792. This is the "8" page for 3 digit codes used for Area Codes and Prefixes.

800	801	802	803	804	805	806	807	808	809	80A=0	80B=*	80C=#	80D	80E	80F
810	811	812	813	814	815	816	817	818	819	81A=0	81B=*	81C=#	81D	81E	81F
820	821	822	823	824	825	826	827	828	829	82A=0	82B=*	82C=#	82D	82E	82F
830	831	832	833	834	835	836	837	838	839	83A=0	83B=*	83C=#	83D	83E	83F
840	841	842	843	844	845	846	847	848	849	84A=0	84B=*	84C=#	84D	84E	84F
850	851	852	853	854	855	856	857	858	859	85A=0	85B=*	85C=#	85D	85E	85F
860	861	862	863	864	865	866	867	868	869	86A=0	86B=*	86C=#	86D	86E	86F
870	871	872	873	874	875	876	877	878	879	87A=0	87B=*	87C=#	87D	87E	87F
880	881	882	883	884	885	886	887	888	889	88A=0	88B=*	88C=#	88D	88E	88F
890	891	892	893	894	895	896	897	898	899	89A=0	89B=*	89C=#	89D	89E	89F
8A0	8A1	8A2	8A3	8A4	8A5	8A6	8A7	8A8	8A9	8AA=0	8AB=*	8AC=#	8AD	8AE	8AF
8B0	8B1	8B2	8B3	8B4	8B5	8B6	8B7	8B8	8B9	8BA=0	8BB=*	8BC=#	8BD	8BE	8BF
8C0	8C1	8C2	8C3	8C4	8C5	8C6	8C7	8C8	8C9	8CA=0	8CB=*	8CC=#	8CD	8CE	8CF
8D0	8D1	8D2	8D3	8D4	8D5	8D6	8D7	8D8	8D9	8DA=0	8DB=*	8DC=#	8DD	8DE	8DF
8E0	8E1	8E2	8E3	8E4	8E5	8E6	8E7	8E8	8E9	8EA=0	8EB=*	8EC=#	8ED	8EE	8EF
8F0	8F1	8F2	8F3	8F4	8F5	8F6	8F7	8F8	8F9	8FA=0	8FB=*	8FC=#	8FD	8FE	8FF

793. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for

paggers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

794. Notes: Examples are good for both area code and prefix applications

795. PUBLIC DECIMAL ----- 1-862 /887 -1234 where A=0, B=*, AND C=#

796. PUBLIC HEXADECIMAL -- 1-88B=*/8C=#0-8600

797. PRIVATE HEXADECIMAL - 1-8FE /8FF -8752

798. Famous residents on this page include:

799. TOLL FREE -local and national view

800. 1-800 ----- Private HEXADECIMAL - Alarms, Point of Sale, Freeway Phones

801. 1-811 ----- Public Decimal Numbers as are used today

802. 1-822 ----- Public Decimal Numbers as are used today

803. 1-833 ----- Public Decimal Numbers as are used today

804. 1-844 ----- Public Decimal Numbers as are used today

805. 1-855 ----- Public Decimal Numbers as are used today

806. 1-866 ----- Public Decimal Numbers as are used today

807. 1-877 ----- Public Decimal Numbers as are used today

808. 1-888 ----- Public Decimal Numbers as are used today

809. 1-899 ----- Public Decimal Numbers as are used today

810. 1-800 = 8AA - Public Decimal Numbers as are used today

811. 1-8BB = 8** - Public HEXADECIMAL - Pagers and Faxes

812. 1-8CC = 8## - Public HEXADECIMAL - Pagers and Faxes

813. 1-8DD ----- Private HEXADECIMAL - Alarms, Point of Sale, Freeway Phones

814. 1-8EE ----- Private HEXADECIMAL - Alarms, Point of Sale, Freeway Phones

815. 1-8FF ----- Private HEXADECIMAL - Alarms, Point of Sale, Freeway Phones

816.

817. Also 80* and 80# and 80D, 80E, 80F, 800 are ALL available for use.

818. Of those numbers that dump (call translated to POTS), which I have no figures on, all dump on to Public Decimal numbers, this is a very big waste. Dump these numbers on to Private HEXADECIMAL Numbers (call translated to HEXpots).

819. We will always have a surplus of these numbers.

820. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

821. This is the "9" page for 3 digit codes used for Area Codes and Prefixes.

900	901	902	903	904	905	906	907	908	909	90A=0	90B=*	90C=#	90D	90E	90F
910	911	912	913	914	915	916	917	918	919	91A=0	91B=*	91C=#	91D	91E	91F
920	921	922	923	924	925	926	927	928	929	92A=0	92B=*	92C=#	92D	92E	92F
930	931	932	933	934	935	936	937	938	939	93A=0	93B=*	93C=#	93D	93E	93F
940	941	942	943	944	945	946	947	948	949	94A=0	94B=*	94C=#	94D	94E	94F
950	951	952	953	954	955	956	957	958	959	95A=0	95B=*	95C=#	95D	95E	95F
960	961	962	963	964	965	966	967	968	969	96A=0	96B=*	96C=#	96D	96E	96F
970	971	972	973	974	975	976	977	978	979	97A=0	97B=*	97C=#	97D	97E	97F
980	981	982	983	984	985	986	987	988	989	98A=0	98B=*	98C=#	98D	98E	98F
990	991	992	993	994	995	996	997	998	999	99A=0	99B=*	99C=#	99D	99E	99F
9A0	9A1	9A2	9A3	9A4	9A5	9A6	9A7	9A8	9A9	9AA=0	9AB=*	9AC=#	9AD	9AE	9AF
9B0	9B1	9B2	9B3	9B4	9B5	9B6	9B7	9B8	9B9	9BA=0	9BB=*	9BC=#	9BD	9BE	9BF
9C0	9C1	9C2	9C3	9C4	9C5	9C6	9C7	9C8	9C9	9CA=0	9CB=*	9CC=#	9CD	9CE	9CF
9D0	9D1	9D2	9D3	9D4	9D5	9D6	9D7	9D8	9D9	9DA=0	9DB=*	9DC=#	9DD	9DE	9DF
9E0	9E1	9E2	9E3	9E4	9E5	9E6	9E7	9E8	9E9	9EA=0	9EB=*	9EC=#	9ED	9EE	9EF
9F0	9F1	9F2	9F3	9F4	9F5	9F6	9F7	9F8	9F9	9FA=0	9FB=*	9FC=#	9FD	9FE	9FF

822. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

823. Notes: Examples are good for both area code and prefix applications

824. PUBLIC DECIMAL ----- 1-900 /929 -9910 where A=0, B=*, AND C=#

825. PUBLIC HEXADECIMAL -- 1-9C=#0/9B=*3-4690

826. PRIVATE HEXADECIMAL - 1-909 /93F -DE31

827. Famous residents on this page include:

828. 911 Universal Emergency number

829. 900 Pay for Services

830. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

831. This is the "A=0" page for 3 digit codes used for Area Codes and Prefixes.

A00	A01	A02	A03	A04	A05	A06	A07	A08	A09	A0A=0	A0B=*	A0C=#	A0D	A0E	A0F
A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A1A=0	A1B=*	A1C=#	A1D	A1E	A1F
A20	A21	A22	A23	A24	A25	A26	A27	A28	A29	A2A=0	A2B=*	A2C=#	A2D	A2E	A2F
A30	A31	A32	A33	A34	A35	A36	A37	A38	A39	A3A=0	A3B=*	A3C=#	A3D	A3E	A3F
A40	A41	A42	A43	A44	A45	A46	A47	A48	A49	A4A=0	A4B=*	A4C=#	A4D	A4E	A4F
A50	A51	A52	A53	A54	A55	A56	A57	A58	A59	A5A=0	A5B=*	A5C=#	A5D	A5E	A5F
A60	A61	A62	A63	A64	A65	A66	A67	A68	A69	A6A=0	A6B=*	A6C=#	A6D	A6E	A6F
A70	A71	A72	A73	A74	A75	A76	A77	A78	A79	A7A=0	A7B=*	A7C=#	A7D	A7E	A7F
A80	A81	A82	A83	A84	A85	A86	A87	A88	A89	A8A=0	A8B=*	A8C=#	A8D	A8E	A8F
A90	A91	A92	A93	A94	A95	A96	A97	A98	A99	A9A=0	A9B=*	A9C=#	A9D	A9E	A9F
AA0	AA1	AA2	AA3	AA4	AA5	AA6	AA7	AA8	AA9	AAA=0	AAB=*	AAC=#	AAD	AAE	AAF
AB0	AB1	AB2	AB3	AB4	AB5	AB6	AB7	AB8	AB9	ABA=0	ABB=*	ABC=#	ABD	ABE	ABF
AC0	AC1	AC2	AC3	AC4	AC5	AC6	AC7	AC8	AC9	ACA=0	ACB=*	ACC=#	ACD	ACE	ACF
AD0	AD1	AD2	AD3	AD4	AD5	AD6	AD7	AD8	AD9	ADA=0	ADB=*	ADC=#	ADD	ADE	ADF
AE0	AE1	AE2	AE3	AE4	AE5	AE6	AE7	AE8	AE9	AEA=0	AEB=*	AEC=#	AED	AEE	AEF
AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AFA=0	AFB=*	AFC=#	AFD	AFE	AFF

832. This is a PUBLIC DECIMAL code page particularly well suited for GENERAL PUBLIC phone uses and that has some PUBLIC HEXADECIMAL codes for pagers, faxes, and voice mail applications, and also has some PRIVATE HEXADECIMAL codes for alarms, point of sale applications, computer modems, etc.

833. Notes: Examples are good for both area code and prefix applications

834. PUBLIC DECIMAL ----- 1-A=021 /A=065 -29A=01 where A=0

835. PUBLIC HEXADECIMAL -- 1-A=09B=*/A=01A=0-2C=#54 B=*

836. PRIVATE HEXADECIMAL - 1-A=094 /A=06D -2E19 C=#

837. Infamous residents on this page include:

838. Double 00 INFO that uses an entire area code, some 268,435,456 lines.

839. Where were our guardians when this was proposed? This is a blatant example of total disregard for the NANP.

840. 1-010/288-\$\$\$ which comes from 10-10-288 to use AT&T as call carrier.

841. Every 10 10 number consumes 65,536 lines for no good reason. If we are to use the 10 10 carrier selection, to dynamically change carriers on each call, then we have the obligation to demand that enough numbers be dialed to STAY WITHIN THE 010 AREA CODE, all the way down to a single line number.

842. With the 00 "double oh, info" we are still wasting very large numbers to provide this service; we waste 268 million lines for this service.

843. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

844. This is the "B=*" page for 3 digit codes used for Area Codes and Prefixes.

B00	B01	B02	B03	B04	B05	B06	B07	B08	B09	B0A=0	B0B=*	B0C=#	B0D	B0E	B0F
B10	B11	B12	B13	B14	B15	B16	B17	B18	B19	B1A=0	B1B=*	B1C=#	B1D	B1E	B1F
B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B2A=0	B2B=*	B2C=#	B2D	B2E	B2F
B30	B31	B32	B33	B34	B35	B36	B37	B38	B39	B3A=0	B3B=*	B3C=#	B3D	B3E	B3F
B40	B41	B42	B43	B44	B45	B46	B47	B48	B49	B4A=0	B4B=*	B4C=#	B4D	B4E	B4F
B50	B51	B52	B53	B54	B55	B56	B57	B58	B59	B5A=0	B5B=*	B5C=#	B5D	B5E	B5F
B60	B61	B62	B63	B64	B65	B66	B67	B68	B69	B6A=0	B6B=*	B6C=#	B6D	B6E	B6F
B70	B71	B72	B73	B74	B75	B76	B77	B78	B79	B7A=0	B7B=*	B7C=#	B7D	B7E	B7F
B80	B81	B82	B83	B84	B85	B86	B87	B88	B89	B8A=0	B8B=*	B8C=#	B8D	B8E	B8F
B90	B91	B92	B93	B94	B95	B96	B97	B98	B99	B9A=0	B9B=*	B9C=#	B9D	B9E	B9F
BA0	BA1	BA2	BA3	BA4	BA5	BA6	BA7	BA8	BA9	BAA=0	BAB=*	BAC=#	BAD	BAE	BAF
BB0	BB1	BB2	BB3	BB4	BB5	BB6	BB7	BB8	BB9	BBA=0	BBB=*	BBC=#	BBD	BBE	BBF
BC0	BC1	BC2	BC3	BC4	BC5	BC6	BC7	BC8	BC9	BCA=0	BCB=*	BCC=#	BCD	BCE	BCF
BD0	BD1	BD2	BD3	BD4	BD5	BD6	BD7	BD8	BD9	BDA=0	BDB=*	BDC=#	BDD	BDE	BDF
BE0	BE1	BE2	BE3	BE4	BE5	BE6	BE7	BE8	BE9	BEA=0	BEB=*	BEC=#	BED	BEE	BEF
BF0	BF1	BF2	BF3	BF4	BF5	BF6	BF7	BF8	BF9	BFA=0	BFB=*	BFC=#	BFD	BFE	BFF

845. This is a PUBLIC HEXADECIMAL code page particularly well suited for pagers, faxes, and voice mail applications, and that has some PRIVATE HEXADECIMAL codes as well.

846. Notes: Examples are good for both area code and prefix applications

847. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

848. PUBLIC HEXADECIMAL -- 1-B=*55 /B=*79 -B=*C=#43

849. PRIVATE HEXADECIMAL - 1-B=*B=*4/B=*C=#7-5B=*42

850. Famous residents on this page include:

851. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

852. This is the "C=#" page for 3 digit codes used for Area Codes and Prefixes.

C00	C01	C02	C03	C04	C05	C06	C07	C08	C09	C0A=0	C0B=*	C0C=#	C0D	C0E	C0F
C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C1A=0	C1B=*	C1C=#	C1D	C1E	C1F
C20	C21	C22	C23	C24	C25	C26	C27	C28	C29	C2A=0	C2B=*	C2C=#	C2D	C2E	C2F
C30	C31	C32	C33	C34	C35	C36	C37	C38	C39	C3A=0	C3B=*	C3C=#	C3D	C3E	C3F
C40	C41	C42	C43	C44	C45	C46	C47	C48	C49	C4A=0	C4B=*	C4C=#	C4D	C4E	C4F
C50	C51	C52	C53	C54	C55	C56	C57	C58	C59	C5A=0	C5B=*	C5C=#	C5D	C5E	C5F
C60	C61	C62	C63	C64	C65	C66	C67	C68	C69	C6A=0	C6B=*	C6C=#	C6D	C6E	C6F
C70	C71	C72	C73	C74	C75	C76	C77	C78	C79	C7A=0	C7B=*	C7C=#	C7D	C7E	C7F
C80	C81	C82	C83	C84	C85	C86	C87	C88	C89	C8A=0	C8B=*	C8C=#	C8D	C8E	C8F
C90	C91	C92	C93	C94	C95	C96	C97	C98	C99	C9A=0	C9B=*	C9C=#	C9D	C9E	C9F
CA0	CA1	CA2	CA3	CA4	CA5	CA6	CA7	CA8	CA9	CAA=0	CAB=*	CAC=#	CAD	CAE	CAF
CB0	CB1	CB2	CB3	CB4	CB5	CB6	CB7	CB8	CB9	CBA=0	CBB=*	CBC=#	CBD	CBE	CBF
CC0	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CCA=0	CCB=*	CCC=#	CCD	CCE	CCF
CD0	CD1	CD2	CD3	CD4	CD5	CD6	CD7	CD8	CD9	CDA=0	CDB=*	CDC=#	CDD	CDE	CDF
CE0	CE1	CE2	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CEA=0	CEB=*	CEC=#	CED	CEE	CEF
CF0	CF1	CF2	CF3	CF4	CF5	CF6	CF7	CF8	CF9	CFA=0	CFB=*	CFC=#	CFD	CFE	CFF

853. This is a PUBLIC HEXADECIMAL code page particularly well suited for pagers, faxes, and voice mail applications, and that has some PRIVATE HEXADECIMAL codes as well.

854. Notes: Examples are good for both area code and prefix applications

855. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

856. PUBLIC HEXADECIMAL -- 1-C=#3A=0 /C=#24-C=#123

857. PRIVATE HEXADECIMAL - 1-C=#C=#C=#/C=#45-B=*789

858. Famous residents on this page include:

859. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

860. This is the "D" page for 3 digit codes used for Area Codes and Prefixes.

D00	D01	D02	D03	D04	D05	D06	D07	D08	D09	D0A=0	D0B=*	D0C=#	D0D	D0E	D0F
D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D1A=0	D1B=*	D1C=#	D1D	D1E	D1F
D20	D21	D22	D23	D24	D25	D26	D27	D28	D29	D2A=0	D2B=*	D2C=#	D2D	D2E	D2F
D30	D31	D32	D33	D34	D35	D36	D37	D38	D39	D3A=0	D3B=*	D3C=#	D3D	D3E	D3F

EC0	EC1	EC2	EC3	EC4	EC5	EC6	EC7	EC8	EC9	ECA=0	ECB=*	ECC=#	ECD	ECE	ECF
ED0	ED1	ED2	ED3	ED4	ED5	ED6	ED7	ED8	ED9	EDA=0	EDB=*	EDC=#	EDD	EDE	EDF
EE0	EE1	EE2	EE3	EE4	EE5	EE6	EE7	EE8	EE9	EEA=0	EEB=*	EEC=#	EED	EEE	EEF
EF0	EF1	EF2	EF3	EF4	EF5	EF6	EF7	EF8	EF9	EFA=0	EFB=*	EFC=#	EFD	EFE	EFF

869. This is a PRIVATE HEXADECIMAL code page particularly well suited for alarms, point of sale applications, computer modems, etc.

870. Notes: Examples are good for both area code and prefix applications

871. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

872. PUBLIC HEXADECIMAL -- NONE

873. PRIVATE HEXADECIMAL - 1-EF0/EF7-EFDE

874. Famous residents on this page include:

875. Table of THREE DIGIT CODES, as used in area codes and prefix codes, provides (1000)base10 blocks or (4096)base16 pages as follows:(continued)

876. This is the "F" page for 3 digit codes used for Area Codes and Prefixes.

F00	F01	F02	F03	F04	F05	F06	F07	F08	F09	F0A=0	F0B=*	F0C=#	F0D	F0E	F0F
F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F1A=0	F1B=*	F1C=#	F1D	F1E	F1F
F20	F21	F22	F23	F24	F25	F26	F27	F28	F29	F2A=0	F2B=*	F2C=#	F2D	F2E	F2F
F30	F31	F32	F33	F34	F35	F36	F37	F38	F39	F3A=0	F3B=*	F3C=#	F3D	F3E	F3F
F40	F41	F42	F43	F44	F45	F46	F47	F48	F49	F4A=0	F4B=*	F4C=#	F4D	F4E	F4F
F50	F51	F52	F53	F54	F55	F56	F57	F58	F59	F5A=0	F5B=*	F5C=#	F5D	F5E	F5F
F60	F61	F62	F63	F64	F65	F66	F67	F68	F69	F6A=0	F6B=*	F6C=#	F6D	F6E	F6F
F70	F71	F72	F73	F74	F75	F76	F77	F78	F79	F7A=0	F7B=*	F7C=#	F7D	F7E	F7F
F80	F81	F82	F83	F84	F85	F86	F87	F88	F89	F8A=0	F8B=*	F8C=#	F8D	F8E	F8F
F90	F91	F92	F93	F94	F95	F96	F97	F98	F99	F9A=0	F9B=*	F9C=#	F9D	F9E	F9F
FA0	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9	FAA=0	FAB=*	FAC=#	FAD	FAE	FAF
FB0	FB1	FB2	FB3	FB4	FB5	FB6	FB7	FB8	FB9	FBA=0	FBB=*	FBC=#	FBD	FBE	FBF
FC0	FC1	FC2	FC3	FC4	FC5	FC6	FC7	FC8	FC9	FCA=0	FCB=*	FCC=#	FCD	FCE	FCF
FD0	FD1	FD2	FD3	FD4	FD5	FD6	FD7	FD8	FD9	FDA=0	FDB=*	FDC=#	FDD	FDE	FDF
FE0	FE1	FE2	FE3	FE4	FE5	FE6	FE7	FE8	FE9	FEA=0	FEB=*	FEC=#	FED	FEE	FEF
FF0	FF1	FF2	FF3	FF4	FF5	FF6	FF7	FF8	FF9	FFA=0	FFB=*	FFC=#	FFD	FFE	FFF

877. This is a PRIVATE HEXADECIMAL code page particularly well suited for alarms, point of sale applications, computer modems, etc.

878. Notes: Examples are good for both area code and prefix applications

879. PUBLIC DECIMAL ----- NONE where A=0, B=*, AND C=#

880. PUBLIC HEXADECIMAL -- NONE

881. PRIVATE HEXADECIMAL - 1-F95/FEC-FED2

882. Famous residents on this page include:

=====
883. ----- Part 4, RULEMAKING AND GOVERNMENTS -----
=====

884. --- RULEMAKING ---
=====

885. ISSUE - ELECTRONIC PUBLISHING: Since this rule making discussion is of particular interest to the general public, elected officials and the rest of the world, both to those on the list and many not on it; order all materials to be submitted both in printed form as is done now, and additionally, in electronic form to the Office of Internet Publications, within the Web masters function. All papers will be published within 3 working days on the CPUC web site using the HTML code <pre> and </pre>, and on a CONTENT PAGE of R98-12-014, which shall be created and kept up to date, listing all such entries, date, and a brief description as they are published. Use the email address: <R98-12-014@CPUC.CA.GOV>, to make all electronic submissions.

886. Ruling and Electronic Publishing Order: From time to time on basis of

complaint, or as a rule of general good housekeeping, examine web site for proper and complete postings, confirming that they are up to date and complete in every way.

887. ISSUE - ORIGINAL TOUCH TONE / DTMF: Pacific Telephone to research and produce and publish the original Touch-Tone / DTMF proposal that was submitted to CPUC and FCC and who paid for what and what digits were included.

888. Ruling and Electronic Publishing Order: What was paid for and by whom and what possible fee impact, if any, is anticipated. Phone company wants to charge for what we already paid for way back then.

889. NOTE: These old records may be faxed using the Fine Setting and captured electronically, then made into image.gif then posted on the web site along with today's response of typed materials in electronic form.

890. ISSUE - PHONE NUMBER RECEIVERS: What precisely is the phone number translations we now use. DTMF to be defined precisely and in relation to what we already know to be 10 pulses and 11 pulses as in 0 and * and #. These represent buttons on the dial phones. What if any deviations are in use. Responsible switch room engineers claim differences.

891. Ruling: What are the official definitions for PUBLIC DECIMAL Phone number digits and their digital and tone patterns. What are the official definitions for PUBLIC HEXADECIMAL Phone number digits and their digital and tone patterns. What are the official definitions for PRIVATE HEXADECIMAL Phone number digits and their digital and tone patterns.

892. ISSUE - CURRENT AREA CODE LOADS: Phone companies to submit and verify and publish on the Internet, all of the following information for all California Area Codes and each of their supporting prefixes in full number form:

893. Area Code/Prefix : 310/221 Date 6/12/99-03:45:12

894. Available Numbers : 10,000 Holder: Pacific Telephone

895. Distribution : 10,000 Pacific Telephone

896. Numbers in use : 5,478 52%
 897. Numbers in suspense: 468 7%
 898. Numbers available : 4,089 32%

 899. Area Code/Prefix : 310/765 Date 6/19/99-08:23:54
 900. Available Numbers : 10,000 Holder: General Telephone

 901. Distribution : 9,000 General Telephone
 902. Numbers in use : 5,478 59%
 903. Numbers in suspense: 468 1%
 904. Numbers available : 4,089 32%

 905. Distribution : 1,000 Jose Communications
 906. Numbers in use : 478 42%
 907. Numbers in suspense: 8 2%
 908. Numbers available : 520 55%

 909. Area Code/Prefix : 619/231 Date 6/19/99-08:23:54
 910. Available Numbers : 65,536 Holder: General Telephone

 911. Distribution : 9,000 General Telephone
 912. Numbers in use : 5,478 59%
 913. Numbers in suspense: 468 1%
 914. Numbers available : 4,089 32%

 915. Distribution : 1,000 Jose Communications
 916. Numbers in use : 478 42%
 917. Numbers in suspense: 8 2%
 918. Numbers available : 520 55%

 919. Distribution : 4,096 Digital Dan Communications
 920. Numbers in use : 78 3%
 921. Numbers in suspense: 0 0%
 922. Numbers available : 4,018 97%

923. Ruling: Phone companies to submit, verify, and publish on the Internet, all of the following information for all California Area Codes and each of their supporting prefixes regarding number loads every 6 months

924. ISSUE - PLAINT EQUIPMENT TO COMPLETE INSTALLATION - All installation of equipment and preliminary testing of HEXADECIMAL phone number lines in San Diego, 619/231 shall be completed by December 31, 1999. Only the following will be required for 231-1110 to 111F as in 10 , 1A, 1B, 1C, 1D, 1E, 1F, total of 7 lines, variations acceptable.

925. Ruling: Pacific Telephone is ordered to provide public industry HEXADECIMAL testing facility, on line by 01Jan2000 for Switches Nortel DMS and Lucent 5ESS.

926. ISSUE - HEXADECIMAL SUCCESS RECORDED ANNOUNCEMENT - Included on all test lines are audio recordings telling of the successful completion of the HEXADECIMAL calls, as follows:

927. (Delay for 3 or so rings, then answer)

928. "You have reached the HEXADECIMAL test line set,

929. Your call was successful for HEX B,

930. Your call was successful for HEX B,

931. Your call was successful for HEX B,

932. Your call was successful for HEX B." (Hang up). The same audio recording format is to be used on all lines. No charge is to be made for long distance calls to these numbers.

933. Ruling: Pacific Telephone is ordered to provide public industry HEXADECIMAL-testing facility, on line by 01Jan2000.

934. ISSUE - WARNING ISSUED TO ALL INDUSTRIES - Notice is hereby given to the public and all industries projected to be included in pending changes in service numbers and surcharges to be imposed.

935. Ruling: All phone companies will produce and insert a bill flyer to inform all recipients of the surcharges and number availability without a surcharge. Announce Industry class of service.

936. ISSUE - REQUEST A LEGAL OPINION BY FCC / CPUC ATTORNEY - The issue of what is the maximum possible extent we may reasonably push the envelope of rulings on the immediate use of HEXADECIMAL Phone numbers must be established. This issue may come to court as a case to be decided on the

appellate level or even go to the Supreme Court. This will surely set a nationwide precedent, allowing other sister state's authorities to move on similar issues. It may be that this issue is considered local by FCC standards and therefore the local authorities (CPUC) have the power to determine whether these proposed changes are within jurisdiction. It may be that the superior courts will decide that it is not their roll to second guess the findings supporting the decision to impose whatever reasonable action may be taken to relieve the area code dilemma already granted to California by FCC.

937. Ruling: Request a Legal Opinion from the FCC / CPUC staff attorney, with the hope that this is within the rights of the local authorities and the consequences of defiant rulings.

938. ISSUE - BEGIN A NEW INVESTIGATION AND RULEMAKING - This issue of HEXADECIMAL Dialing must be pursued. The ALJ should create the proper forum for further action.

939. Ruling: Create a new forum ASAP.

940. WHAT THE RULES OUGHT TO BE COMMISSION CREATES INDUSTRY CLASS OF SERVICE

941. RULE MAKING REQUESTED - The FCC / CPUC is requested to order the following:

942. Establish a HEXADECIMAL PHONE line test center in San Diego within 30 days of order.

943. Establish an Internet reporting site to report problems within 30 days of order.

944. Establish an Internet page to update information to manufacturers within 30 days of order.

945. Order the creation of the INDUSTRY class of PHONE service, effective with order.

946. Order that INDUSTRY class of service will address PHONE NUMBERS that

are not limited to HEXADECIMAL PHONE NUMBERS.

947. Order all plant equipment in all prefixes to demonstrate HEXADECIMAL proof of on line operation, and report it to CPUC within 30 days of the order.

948. Order fines for noncompliance of not less than one thousand dollars per incidence per day.

=====
949. --- GOVERNMENTS ---
=====

950. Existing federal regulations prohibit an area code from being assigned based solely on the provision of a specific type of telecommunications service or use of a particular technology.

951. The area code was not assigned based SOLELY on specific type of service or technology BUT we can use those parts as in 34*-1234 for this very reason

952. FEDERAL BROUHAHA IS BREWING - On the national level, we have several elected officials that are under the gun to produce legislation that has the appearance of satisfying the constituent cry for help to stop the area code expansion. What is this legislation and how will it affect this issue is another matter.

953. The bill in congress is SB 765, sponsored by Senator Collins of Maine and Senator Toricelli of New Jersey. This bill seeks to ??? No reply!

954. PHONE COMPANIES IN PERSPECTIVE PHASORS DRAWN AND SET ON STUN - There is no ax to grind with the phone companies other than just to express the results of numerous contacts made and ignored over the years. Time after time, questions of interest were asked and either ignored or replied to by totally incompetent respondents. Needless to say, this pattern is being repeated even today. During the last year I have contacted every major phone company in America with the same result: nothing! Even when given an inquiry number or making friends with the secretary to an executive of the

company, nothing ever comes of a proposal to expand the use of HEXADECIMAL numbers. Does it shock you to find such a closed mouth position? Or as a friend points out, it should really alarm us!

955. In the final analysis, anything done to the phone company is well deserved and late in coming; truly they are the companies we all love to hate, and for very good reason!

956. I have requested a tour of the Hillcrest Facility in San Diego. I want to hold a line card in my hand and examine the equipment that detects the "tones to digits" when a number is dialed. I want to see the computer that provides service to this area. It does no good to request; they cite proprietary reasons or need to know as excuses for never allowing the fox in the chicken house.

957. Then there is the closed nature of this entire industry. I am reasonably good at getting inside a company, but nothing works with the Phone Company or its suppliers. For example, the computers being used for prefix service are of interest to me. I posed as the American Company hired to provide equipment for phone installation in an Arab country that is filthy rich and wants to replace existing equipment and services with all new stuff. In each case, they never returned my calls. Repeatedly, I attempted to get inside and got no response. This closed atmosphere is dangerous and I suspect I know why it exists in the first place. It's money, money, and money! If your pulling a fast one, your best position is don't let them in at all.

958. I firmly believe the Phone Company has inflated the costs for computers and not properly applied cost benefits derived by multiple prefixes being provided by a single computer. All things considered, this points to fraud on the line! Because the phone company has adopted the concept that a fair return on capitol investment is 10%, the question is, what is the true value of the investment considering all aspects of the way business is done today. This does include the over inflated costs that are used to keep the phone bills outrageously high in contrast to other industries that are all considerably lower than they were just a very few years ago.

959. COMPETENT CONSULTANTS COUNT AND IT SHOWS - Examining the AB818, a bill of Assemblyman Knox, reveals the lack of a good understanding of the problem and the solution. I am glad Mr. Knox took some action, but it is obvious he had no competent, degree, seasoned, experienced communications consultant to advise him of what action was to be taken. This shows as a lack of professionalism when dealing with an issue that affects every person in California and even the nation.

960. The idea of identifying the paging and faxing industries as the culprits is ludicrous. Any person with a lick of sense would know about and advise the law maker of the other industries that use even more of the decimal numbers than do these industries, combined!

961. For example, we have a REFERENCE LIST OF GOOD CONSERVATION CATEGORIES - The list:

962. 800/888 Toll Free Translator Numbers

963. Alarms, Fire, Burglary, Holdup Systems

964. ATM Systems

965. Automatic Paging Systems

966. Bulletin Board Computer Systems

967. Call Box Signaling Systems

968. Computer Access Phone Numbers as for AOL etc.

969. Computer Access Second Line at Home

970. Corporate Systems

971. Credit Card Verification and Approvals

972. Elevator Phones

973. Emergency 911 System Phones

974. Freeway Emergency Phones

975. Internal Voice Mail

976. Military Communications

977. Pager Phone Services

978. Pay Phone Service

979. Phone Company Business Offices and Repair Service

980. Point of Sale Transactions

981. Public Voice Mail

982. Rotary Lines Second and Above (2-??) (UAL: 1 decimal, 999 HEXADECIMAL)

983. All of the above should be HEXADECIMAL NUMBER based.

984. So you can see, the old adage is still true: garbage in, garbage out! This applies to law making as well as other endeavors. But with a little luck, the California Senate will seek the sage advice of knowledgeable persons, hopefully, wiser than me, before proceeding further with this bill.

=====

985. ----- Part 5, PRAYER AND SUBMISSION -----

=====

986. --- PRAYER ---

=====

987. INTERVENOR OFFERS PRAYER - Intervenor offers this as a Prayer and thanks you for your time:

HE WHO WALKS
WITH THE WISE
GROWS WISE, BUT
A COMPANION OF
FOOLS SUFFERS HARM.

PROVERBS 13:20.

988. I hope you have enjoyed our little walk, until next time,
"Ad Astra Per Aspera."

=====

989. --- SUBMISSION ---

=====

990. These requirements place an additional burden on members of the public that want to participate in the functioning of the FCC. A people without a voice, cannot be heard, but we need to apply some common sense here as well.

991. HEXADECIMALS HERE TO STAY - Hexadecimals are taught in several high schools and junior colleges and is required in the sophomore year in

college as Number Set Theory. Hexadecimals are well-defined and settled as to purpose and use and are widely used in a multitude of industries, including the alarm, computer, communications, and telephone industries. Education is power, get some!

992. STANDARD NOT NOVEL - Let me assure you all, nothing in my proposal is NOVEL. On the contrary, all dialing is normal and standard and fully complies with the planed applications that history documents in many published books available in any quality scientific library. Had anyone taken a moment to consult with the non existent electronics communications engineers or computer engineers on FCC staff or do even the most minor research in the Library, this would have been very apparent. Furthermore, this information is published on my web site in substantial detail, and in all cases, THE NEILL PLAN is fully compliant with NANP from the word GO, and since the public already paid for this system more than 20 years ago, it is absolutely FREE and begs to be used!!!!

993. REQUEST FOR NEW PROCEEDING - Please, in the public interest, order a new proceeding immediately! Let us examine this HEXADECIMAL issue.

994. HISTORICALLY AND OFFICIALLY - Bellcore Notes on the Network (1990 p 6-183) describe a 16 digit number system, 1-9, 0,*,#,A,B,C,D. The fourth vertical column at the frequency of 1633 Hertz per second is the main subject of this writing. Note that the lower row shows that we have been using HEXADECIMAL digits for a long time, 0 from the very start, and also * and #, all from when we all first paid for this system! Today's switches have provision for their use and the network handles them every day. Has any discussion considered using the A-F digits to extend the life of the current 10 digit dialing plan?

995. Hexadecimal dialing is amenable to any proposal that involves Decimal Dialing since Decimal Dialing digits are a sub set of Hexadecimal digits and all are compatible with the network and switches.

996. CONCLUDING REMARKS - I have complied with, to the extend reasonably possible, all the items and I hope for the best, knowing that I have done the right thing.

997. CHALLENGE OF POWER - I must inform all who will read this writing that I have done as well, under the circumstances that I find myself, as can be expected. Make NO mistake about it, this writing needs a lot of work to meet MY STANDARD, but I am forced to meet the requirements of the order, so I do not have control of the due date. Their is this schedule somebody made that dictates procedurally when everything is to happen, even at the expense of an old point: Why is it that we have time to do it over, but not time to do it correctly in the first place.

998. I am embarrassed to have to release this without cleaning it up and making it flow properly and organizing the topics.

999. This writing is however, the essence of the issue. HEXADECIMAL NUMBERS and their relationship to the TELEPHONE NETWORK are presented well enough for you to get the idea and proceed with it on your own.

SUBMISSION -

1000. These COMMENTS ABOUT AND PROPOSAL are Respectfully submitted by:

Prof Bill Neill, In Pro Per
PRIVATE Citizen, Professional Engineer
P. O. Box 33666, San Diego, California 92163-3666
Telephone: 619/231-1313, Email: proev@mill.net

Dated: July 27, 1999

Pro Per Attorney for
Prof Bill Neill

VERIFICATION

I swear that the information provided herein is true and correct to the best of my knowledge.

Prof Bill Neill

July 27, 1999.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the document titled:

COMMENTS ON AND DIALING PROPOSAL FOR THE EXPANDED USE OF HEXADECIMAL PHONE NUMBERS UNDER A NEW "INDUSTRY" CLASS OF SERVICE THAT WILL ALLEVIATE THE AREA CODE ASSIGNMENT CRUNCH AND PROVIDE SUBSTANTIAL EXPANSION OF ALREADY AVAILABLE NUMBERS IN ALL LOCATIONS AND IN ALL AREA CODES AND ALL AT NO COST TO ANYONE

on the Federal Communications Commission by each of the following identified methods:

PAPER ORIGINAL AND COPIES for FORMAL PLUS CIRCULATION filing

If you would like your formal comments to be circulated to the Commissioners, an original and nine (9) copies must be submitted, by mailing 1 original and 9 copies properly addressed by first-class mail with postage prepaid to Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W. Room TW-B204F, Washington, D.C. 20554.

ELECTRONIC FILE ON DISK:

By mailing 1 data disk containing file copy named BNEILLCP in Macintosh MSWord format, labeled and addressed by first-class mail with postage prepaid in care of the Clerk of FCC, Washington, D.C. 20554.

ELECTRONIC FILE VIA INTERNET:

By electronic transmission of file copy named BNEILLCP, in Macintosh MSWord format, labeled and addressed to
<<http://www.fcc.gov/e-file/ecfs.html>>.
the electronic address for the Clerk of FCC.

ELECTRONIC INTERNET:

Collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 1-C804, 445 12th Street, S.W., Washington, D.C. 20554, or ELECTRONIC via the Internet to <jboley@fcc.gov>

ELECTRONIC INTERNET

PAPER to Timothy Fain, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, D.C. 20503 or ELECTRONIC via the Internet to
<fain_t@al.eop.gov>.

ELECTRONIC FILE ON DISK:

choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to:
Alvin McCloud, Common Carrier Bureau, Network Services Division, 445 Twelfth Street, S.W., Room 6-A423, Washington, D.C. 20554.

ELECTRONIC FILE ON DISK:

In addition, commenters must send diskette copies to the Commission's copy contractor,
International Transcription Service, Inc., 1231 20th Street, N.W., Washington, D.C. 20037.

Executed on July 27, 1999, at San Diego, California:

Fidel Hernandez

ACKNOWLEDGMENTS AND CREDITS

In recognition of the civic duty of these companies and individuals that have contributed to the success of this adventure and deserve credit for doing their part, above and beyond the call of duty, the author wishes to thank:

Macintosh Quadra 840 AV by Apple Computer, without their intuitive interface we'd all go nuts.

MillenniaNet, my ISP, at www.mill.net for allowing me to exceed the allotted time limits without complaint.

The San Diego County ELECTRIC VEHICLE Consortium for allotting space in the public interest.

Webcom Com, America's small business web site hosts at www.webcom.com, for hosting.

WEBexpress, a PacifiCraft department of Pacific Software, for site programming. Serving the computer industry since 1967.

Kinko's Copies, Hillcrest, San Diego, for kind and special assistance of Linda Roberts with duplication and assembly.

Fidel Hernandez, encouragement when you least expect it, and George Myrick, just keep on writing, and the inspiration of Donna Paoli, Rudy and all the gang.

And the best companion a keyboard ever had, Bandit, all 15 pounds worth, occasionally pawing at those flying fingers,

always there, but mostly just sleeping or purring or hungry!

1001.

© COPYRIGHT 1999 by Prof Bill Neill.

Permission to use in whole or part is granted provided
credit line is given. Questions to <proev@mill.net>. end.